Heating Piping & Air Conditioning

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. . . for CONSULTING ENGINEERS · MECHANICAL (Heating, Piping, and Air Conditioning) CONTRACTORS ENGINEERS WITH PLANTS AND BIG BUILDINGS

HEATING, PIPING & AIR CONDITIONING'S

Trade Literature Supplement

HOW TO USE THIS INFORMATION

Catalogs, bulletins, and other helpful data available to you from advertisers in Heating, Piping & Air Conditioning are briefly described in this supplement. Each description is numbered. Just circle the numbers for those you want on the handy postage-paid card on pages 2-67 and 2-68. Your requests will be passed along to the manufacturers whose literature you ask for.

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Air Distribution, Air Diffusion, Ductwork, Grilles, Etc.

1 Access Doors, Louvers, Dampers

Bulletin 120-160-ACC covers insulated duct access doors; adjustable and stationary louvers; air control fire dampers; back pressure dampers; manual, automatic and motorized wall and horizontal shutters.—Ammerman Co., Inc.

2 Acoustic Terminal Controls

Catalog 1160 provides details on five all-air high velocity acoustic terminal control units; three ceiling models and two window perimeter models. Catalog 1161 covers high capacity units, air valves and blenders while catalog 1361 describes low velocity systems.—Carnes Corp.

3 Adjustable Pattern Diffusers

Literature describes adjustable diffusers in either round or square type. Supplied for pattern as well as volume control. Eight different types. Can be supplied for supply and return use either in round or square pattern.—Universal Diffuser Corp.

4 Air Blender

Eight page catalog lists system advantages and design features of "Twin-Duct" air blender. Selection data and examples provide easy reference source. Performance, control, engineering specifications and dimensions included.—Worthington Corp.

5 Air Conditioning Hose

New "Super-Flex" general air conditioning hose described in four page folder giving details of construction, application, specifications and new features.—Acme-Hamilton Mfg. Corp.

6 Air Diffusers

Bulletin K27-A describes linear and rectangular series air diffusers, gives dimensional drawings for several types in each series, and selection and performance data, with list of agents. Offered in three series: square, panel, long slotted units combine best air distribution and modern styling.—Connor Engineering Corp.

7 Air Diffusion Equipment

Fifty-four page catalog 1-59 has specifications and selection data on standard line of grilles, registers and other air diffusion equipment; catalog merited a certificate in 1960 building products literature competition sponsored by American Institute of Architects and the Producers' Council.—Waterloo Register Co., Inc.

8 Air Distribution from Ducts

Brochure describes "Duct-D-Fuser" air distribution device installed as integral part of circular duct system. Performance data and engineering design procedure included.—United Sheet Metal Co., Inc.

9 Air Distribution Products

Line of engineered air distribution products depicted in booklet F-4471-8. Includes ceiling, sidewall and sill diffusers plus continuous line models. Single duct, double duct and under-window high velocity units described. Two versions of combination light and air diffusing troffers listed.—Barber-Colman Co., Air Distribution Div.

10 Air Distribution Products

Six page brochure describes line of air distribution products. Includes information on new, all extruded, architecturally etched finish line of registers and grilles.—General Air Products Corp.

11 Air Distribution System

"Fiberglas Acousti-Flo" air distribution system literature describes system, installation, performance data of ceiling air distribution system combining air diffuser and fiber glass feeder duct system.—Owens-Corning Fiberglas Corp.

12 Airfoil Dampers

Newly designed, extruded aluminum airfoil, double blade and frame damper has special grooves in channel and blade to receive weatherstripping to make damper airtight. Can be

used for volume or auto damper operation.—Arrow Louver & Damper Corp.

13 Asbestos-Cement Ducts

Four page reprint of technical article TR-277, "30% Lower Pressure Drop with Smooth-Flow Air Ducts," written by D. W. French, research engineer and T. R. Gillen, manager of engineering, of the manufacturer's pipe div. Relates results of Research Center tests of asbestos-cement ducts for perimeter heating system air distribution.—Johns-Manville.

14 Backdraft Damper

Quiet, sensitive back draft damper answers noise and ventilating problems. Automatic blades open and close with slight air movement and are rustproof, corrosion- and fireproof. Saves fuel, conserves air conditioning output. Available for installation in vertical or horizontal ducts.—The Rittling Corp.

15 Ceiling Diffusers

New 40 page catalog gives details, including dimensions and selection data, on line of round, half-round and square ceiling diffusers and accessories. Contains engineering data section with drawings and tables, also installation data and air flow measurements.—Titus Mfg. Corp.

16 Ceiling Diffusers

Bulletin describes step-down and flush type ceiling diffusers as well as square models. Includes information on round and square ceiling dampers, knob and screwdriver operated. List prices, free areas and dimensional data provided.—United States Register Co.

17 Copper-Alloyed Galvanized Steel

Bulletin WS-255 describes "SofTite Cop-R-Loy" galvanized steel sheets for air conditioning ducts, other applications. Discusses how and where used, manufacturing process, and other subjects.—Wheeling Steel Corp.

18 Directional Air Diffusers

Twelve page catalog 7-61 announces newly designed, all extruded aluminum type D directional air diffusers. Offered in square and rectangular designs with completely removable inner core assemblies. Five frame styles and 14 different core patterns available. Selection data included.—Waterloo Register Co.

19 Dual Duct Air Conditioning

Guide details features of high velocity dual duct air conditioning systems and shows typical arrangements for architects and consulting engineers.—Buensod-Stacey Corp.

20 Dual Duct Air Conditioning Air Mixing Units

Sixteen page bulletin DD-6 gives information on dual duct air mixing units for use in high or low pressure dual duct air conditioning systems with supplementary items such as enclosures, distributing headers, high velocity outlets, etc. —Buensod-Stacey Corp.

21 Electrolytic Zinc Coated Sheet

Folder covers "Weirzin" electrolytic zinc coated sheet produced by modern, advanced electroplating methods. Uniform coating assures in fabrication durable end product of long life and utility. Exactly suited to application, inside or out, painted or not.—Weirton Steel Co.

22 Engineering Manual on Air Distribution

Engineering manual on line of low velocity, modular, linear and unitary perforated ceiling diffusers. Equipped with MV-100 industrial air valve. Booklet also covers line of combination lighting and air units.—Multi-Vent, Div. of The Pyle-National Co.

23 Extruded Aluminum Grilles

Technical catalog LD-100 contains performance data, selecting and sizing methods for "Agitair Decoraire" extruded aluminum grilles in 12 sizes with three degrees of deflection (0, 15 and 25 deg) and in widths of 1½, 2, 3, 3½, 4, and 6 in. Also shows group of modern design extruded aluminum borders.—Air Devices Inc.

24 Extruded Aluminum Louvers

Stationary and adjustable louvers fabricated of 12 ga and ⅛ in. thick aluminum extrusions. Extruded aluminum penthouses, motorized dampers and back draft shutters also available. Mill, caustic etch, anodizing and alumility finishes available.—Arrow Louver & Damper Corp.

25 Extruded and Fabricated Louvers, Dampers

Catalogs P-7025 (extruded aluminum penthouses), P-7026 (fabricated penthouses), 7028 (extruded aluminum louvers) and 7029 (sheet metal louvers) describe louver and damper line. Graphic and tabular engineering data presented for proper selection.—Carnes Corp.

26 Fabricated Grilles

Bulletin 43 describes heavy duty bar type grilles — all steel or all aluminum — designed and built to give best possible combination of strength and high open area. Widely used in modern schools, colleges, hospitals, ocean liners, sports arenas, etc. Built to order (no standard sizes) in any required rectangular size or shape.—Diamond Mfg. Co.

27 Fiber Duct

Four page brochure on "Sonoairduct" fiber duct. The duct is designed particularly for slab floor perimeter heating or combination heating and cooling systems. Information regarding air friction loss, thermo-conductivity and general installation instructions included.—Sonoco Products Co.

See the index on the front cover of this supplement to Heating, Piping & Air Conditioning for the classifications of products under which this literature is listed.

Note that each of the items describing a catalog, bulletin or other piece of trade literature in this supplement has its own title for your convenience in finding material on the subjects you want. In addition, the listings are grouped under general headings, which headings are indexed on the front cover of this trade literature supplement to Heating, Piping & Air Conditioning.

Each individual item appears under the heading that applies to its main content. However, many of the catalogs and bulletins are devoted to more than one subject, so that you may find the listing you want under any one of several of the main headings.

It is therefore suggested that you look over all the individual items, circling the numbers for those you want on the reply card on page 2-67.

28 Fire Damper

Catalog features VWNYT-1 fire damper produced under factory inspection and label service of Underwriters' Laboratories. Also briefly describes line of high pressure dampers, automatic and manual dampers, extruded aluminum louvers, stationary and adjustable louvers, automatic and backdraft dampers.—Imperial Damper Co.

29 Flat Oval Duct and Fittings

Brochure describes flat oval duct and fittings for use where headroom limitations prevent using circular duct. Design includes unique "Truss Coupling" for necessary stiffening to resist static pressure deflection and wall vibration. Flat oval sizes and types of fittings shown.—United Sheet Metal Co., Inc.

30 Flexible Air Duct

Installation instructions for flexible air duct illustrated step by step in form 343 INS. Explains how to cut duct to length, how to splice two lengths and how to connect it to metal fitting.—Wiremold Co.

31 Flexible Air Duct

Catalog 10-19 A/C on the facts about "Thermaflex" contains details on UL approved flexible connector duct for low and high velocity air distribution systems. Includes diameters, lengths, construction, air friction loss charts, and other engineering information.—Flexible Tubing Corp.

32 Flexible Air Duct Connections

Details on new soft cuff for tight connections of flexible air duct given in form 632. Contains information on construction, specifications, maximum OD of fittings, when to use, installation instructions.—Wiremold Co.

33 Flexible Air Duct Selection Guide

Four page brochure 622 covers line of flexible air duct for air conditioning, industrial ventilating and materials handling. Contains selection guide to six types of duct; information on where to use it, specifications and typical applications. Engineering features and installation data included.—Wiremold Co.

Over 850 descriptions of catalogs, bulletins and other data available to you without obligation on request are described in these pages.

34 Flexible Metal Exhaust and Blower Tubing

Bulletin IPB-Sec. 3A describes "Steelflex" (galvanized steel) and "Nicroflex" (302 stainless steel) all metal flexible tubing for exhaust and blower service on ventilating and blowpipe systems. Gives range of sizes and weights unpacked, asbestos or copper-wire packed.—Universal Metal Hose Co.

35 Flexible Metal Tubing Ducts

Bulletin IPB-Sec. 3A discusses U-100 "Steelflex," galvanized steel, all metal flexible tubing for conveying conditioned air in high velocity air conditioning systems.—Universal Metal Hose Co.

36 Glass Fiber Air Duct

Folder describes and discusses advantages and installation of "Armaglas" prefabricated round air duct. Made of fine glass fibers bonded together and molded into strong lightweight tube of thermal insulation with tough airtight, vaportight vinyl skin.—Armstrong Cork Co.

37 Grilles

Catalog 36, 100 pages (AIA File 30-E) describes architectural grilles, stamped out of steel, aluminum, bronze or any other commercial metal, in any thickness up to ¼ in. Shows unit openings actual size, gives working data. Also describes other products for heating, ventilating, air conditioning.—Diamond Mfg. Co.

38 Grilles, Registers and Accessories

Thirty-six page catalog describes line of "Airfoil" supply and return grilles, registers and accessories. Includes engineering and performance data compiled by manufacturer's research laboratory.—Titus Mfg. Corp.

39 High Velocity Duct and Fittings

Eight page brochure detailing circular duct and low friction loss fittings, as well as accessories specifically designed for high velocity systems, including fire dampers and sound absorbers.—United Sheet Metal Co., Inc.

40 Injection Molded Modular Diffusers

Catalog 460 describes new polycarbonate resin "Lexan" diffusers. Shows how three types of modules provide infinite number of air patterns

and diffuser sizes. Also contains diffuser engineering data and sound rating information.—Carnes Corp.

41 Jet Diffusers

Eight page catalog RJ-100 describes new series of "Roto-Jet" diffusers for extremely long blows; suitable for installation in large interior spaces. All aluminum construction with individually adjustable vanes and rotating cylinder. Contains performance data, dimensions, suggested applications.—Air Devices Inc.

42 Light and Air Diffusers

Combination light and air diffusing troffers featured in booklet F-9768. Both enclosed and louvered troffers available to integrate two functions, combining form and function for modular ceiling construction.—Barber-Colman Co., Air Distribution Div.

43 Linear Diffuser

"Line-Air" linear diffuser combines attractiveness and sound engineering design. Made in any width and length, either in steel or aluminum with anodized finish. Various types provide for high wall, ceiling, floor and baseboard installations.—Universal Diffuser Corp.

44 Motorless Valve Attenuator

Bulletin K-45 describes "Kno-Draft" series 45P valve attenuator, which uses no motors or linkage of any kind and is designed for use in dual duct high velocity air distribution systems. Features are listed, function explained, along with performance data and dimensions.—Connor Engineering Corp.

45 Multi-Pattern Diffusers

Custom-made diffusers to suit all conditions are made with interchangeable cores. Over 20 styles, need no blanking baffles. Construction permits diffusion pattern to remain parallel to ceiling, provides for rapid air mixture and temperature equalization. MP diffuser supplied in steel with metallic baked enamel or in anodized aluminum finish.—Universal Diffuser Corp.

46 Perimeter Base Diffusers

"Super" base diffusers are produced in 2 and 4 ft lengths which with connectors may create any desired length of which 2 ft is a multiple. Separate pipe to each diffuser, or with end caps removed may be used as a continuous run. Form 101 also lists floor registers, diffusers, toe plates. Prices included in literature.—United States Register Co.

47 Prefabricated Duct

Brochure GBD describes characteristics of prefabricated G-B glass fiber duct for heating and cooling. Covers technical data on thermal conductivity, heat saving and acoustical efficiency. Explains general installation procedures. Lists available sizes, packaging, shipping information. —Gustin-Bacon Mfg. Co.

48 Registers and Grilles

New 24 page catalog G 202 describes line of registers and grilles. Includes information on and detailed drawings of new heavy duty grilles; new all extruded, architecturally etched finish registers and grilles; extruded door grilles; restricted vision heavy duty grilles.—General Air Products Corp.

49 Registers and Grilles

New catalog 61 shows several new items, especially in the "Fabrikated" commercial line of registers and grilles.—The Independent Register Co.

50 Registers, Grilles, Diffusers

Sixty-four page catalog A covers line of registers, grilles, diffusers and accessories for residential and commercial heating and air conditioning. Sizes, weights, selection tables presented and prices listed.—United States Register Co.

51 Regulators, Dampers, Grilles, Diffusers

Sixteen page catalog shows line of manually controlled surface, concealed, high pressure floor-line, remote control and air-split regulators; dampers and damper hardware; adjustable air conditioning registers; grilles and baseboard diffusers for every type of heating and air conditioning installation.—Young Regulator Co.

52 Round Ceiling Diffusers

Catalog F-4085-7 provides selection data for improved versions of "Venturi-Flo" round ceiling diffusers. Performance data reorganized to simplify selection. Features new adjustment mechanisms, easier removal of inner assembly for installation.—Barber-Colman Co., Air Distribution Div.

53 Slot Type Diffusers

Sixteen page catalog ES-105 describes new series of extruded aluminum "Stripline" slot type diffusers. Includes engineering data, selection and sizing procedures, application data, dimensions. Made in three distinct styles and two types of mounting frames with removable cores. —Air Devices Inc.

54 Variable Volume Reheat Unit

New bulletin gives details on variable volume reheat unit, the first of its kind. Provides better, more efficient, lower cost heating, cooling and ventilating for perimeter areas of commercial and industrial buildings. Can be used with low or high pressure systems.—Titus Mfg. Corp.

55 Volume Dampers

Literature describes line of hand operated volume and motor operated dampers. Specialized fired dampers conforming to NBFU code made in pivot and multi-blade types. Also backdraft dampers, shutter, and flap dampers.—Arrow Louver & Damper Corp.

56 Zinc Coated Steel

Literature deals with "Weirkote" tightly bonded zinc coated steel produced by modern continuous process. Can be drawn, severely formed, crimped, rolled or seamed without harming protective coating. Offers permanent protection of zinc coating.—Weirton Steel Co.

Air Filters & Air Cleaners

57 Air Contamination Protection

Technical products release 1502 describes combination C-B-R filter for protection against airborne contamination of chemical, bacteriological and radiological types as designed to meet USAF ballistic missile division's specification for underground missile launching sites. Typical filter installation for a small shelter included. —Mine Safety Appliances Co.

58 Air Filter

General folder on "Dust-Magnet" air filter gives prices on stock size filters. Folder fits regular letter envelope.—Stoddard Industries, Inc.

59 Air Filter Engineering Data

Four page engineering folder shows charts of dust pickup, pressure drop, filter capacity, other general and technical filter data on "Dust-Magnet" electrostatic air filter.—Stoddard Industries, Inc.

60 Air Filter for High Concentrations

Bulletin 150-101 describes "Lint-A-Maze" automatic air filter designed to handle high concentrations of coarse, bulky or fibrous materials in textile mills, processing plants, or as a prefilter. —Air-Maze Div., Rockwell-Standard Corp.

61 Air Filter Specification Sheet

Specification sheet contains pictures and general information on "Dust-Magnet" electrostatic air filter.—Stoddard Industries, Inc.

62 Air Filtering Equipment

Bulletin 6-100-4 describes line of air filtering equipment for air conditioning, ventilating and heating systems in commercial and industrial applications. Includes automatic filtering equipment, high efficiency filters with disposable media, panel filters and grease filters.—Farr Co.

63 Air Filters

Bulletin AD-101 describes wide variety of "Airsan" air filters. Includes welder and OEM custom types. Describes specialized applications of standard filters. Lists manufacturers using these filters.—Air Filter Corp.

See the index on the front cover of this supplement to Heating, Piping & Air Conditioning for the classifications of products under which this literature is listed.

64 Air Filtration

Forty page brochure, "Micromat System of Air Filtration," discusses air pollution, principles of air filtration and the application of various types of synthetic fiber media in commercial, industrial, institutional and residential installations, with six media types included.—Microtron Corp.

65 Commercial Air Filtration

Reprint on advantages of manufacturer's filters in commercial applications points up new factors for consideration where air is filtered for stores, restaurants, motels, etc.—Fram Aire Co.

66 Cube Replacement Air Filter

Four page technical bulletin describes physical properties and uses of "Ulok" cube type replacement air filter. The largest cube shape presents more filtering surface (1832 sq in.) to the air stream, providing for higher efficiency over far longer life with unusually low pressure drop.—Union Carbide Development Co., Div. of Union Carbide Corp.

67 Discoloration at Air Outlets

"Streaking & Smudging Around Air Outlets" discusses causes of discoloration of surfaces at air outlets, including design of outlet, effect of induced air movement, and filter performance. —Air Filter Institute.

68 Disposable Media Air Filters

Bulletin B-1400-8 describes "Roll-Kleen" V-7 air filters for effectively cleaning air by means of disposable filtering media. Various models covered and advantages given for handling large volumes of air. Information on construction, operation, installation, maintenance and performance, dimensions and capacity tables.—Farr Co.

69 Dry Air Filters

Bulletin 572A describes "Dycon" type DY dry air filters. No oily adhesives, yet has high dust-holding capacity. Rinse in water to clean. Aluminum frames. Underwriters listed. Cell frames in 7/16 in. and 7/8 in. thicknesses; filters in standard or special sizes as required.—Continental Air Filters, Inc.

70 Dry Type Unit Air Filter

Bulletin 228 describes new "AAF Dri-Pak" series 2000 dry type, high efficiency, low resist-

ance air filter. Eliminates costly back-up wire grid and metal enclosures, uses collapsible and disposable cartridges, reduces filter maintenance. Glass fiber filtering media can offer up to 97 percent air cleaning efficiencies.—American Air Filter Co., Inc.

71 Dust Filters

Brochure features panel air filters for maximum dust removal efficiency through use of unique filter element fabricated of positive interlocking coil springs. Assures unchanging density throughout years of heavy duty service. Suitable for offices, department stores and plants.—Vortox Co.

72 Dust and Odor Filter Frame

Product data sheet 131 shows new "Aerosolve"-charcoal filter frame specially designed to simplify installation and servicing of the two types of filters. Available for charcoal filter of user's choice or as complete packaged unit. Information on dimensions, efficiencies and pressure drops included.—Cambridge Filter Corp.

73 Electronic Air Cleaner

Two-stage electrostatic precipitator designed especially for residential air cleaning. Compact unit. Dust spot efficiency up to 95 percent. Features simple installation, flexibility for all forced air systems and living area visibility.—Minneapolis-Honeywell Regulator Co.

74 Electronic Air Cleaners

"The Application of Electronic Air Cleaners" is a two page discussion of various factors to be considered in applying ionizer plate type electrostatic air filters to air cleaning problems.—Air Filter Institute.

75 Filter and Adsorber

Technical bulletin describes "Roto Aire" RTM3-IR combination replaceable media air filters and total air detention type gas and vapor adsorbers. Designed to clean and purify air at high efficiency. Activated charcoal cartridges remove 75 percent of airborne contaminants.—Burke and Co.

76 Flat Replacement Air Filter

Four page technical bulletin describes physical properties and uses of flat "Ulok" replacement air filter. Introduces new and advanced materials and designs to filter air efficiently. Included are graphs showing effectiveness of the air filter.—Union Carbide Development Co., Div. of Union Carbide Corp.

77 Germicidal Air Filters

Reprint of study on how air treatment helps filter out infection, by Dr. Raymond M. Young, Ph.D., analyzes efficacy of germicidal air filters in trapping and killing pathogenic bacteria to control infections.—Fram Aire Co.

Your comments on this Trade Literature Supplement to Heating, Piping & Air Conditioning are invited.

78 Grease Filter Design Booklet

Booklet discusses problems of construction and installation of RP grease filters in kitchen exhaust systems. Technical features and angles involved covered clearly.—Research Products Corp.

79 Grease Filter Panels

Bulletin 308-101 covers "Greastop" filter panels to stop grease and prevent fires in range hoods and similar applications. Both high and low velocity units available.—Air-Maze Div., Rockwell-Standard Corp.

80 Grease Filters

Catalog sheet explains how kitchen fires originate over range in ventilating system. Lint and grease from fry vats and kitchen ranges coat duct walls with highly flammable mixture. VG panel air filters safely trap mixture. Effectiveness as flame arresters and efficient filters shown in service and by tests.—Vortox Co.

81 High Efficiency Air Filters

Bulletin 132 describes "Aerosolve" high efficiency, low pressure drop, comfort air conditioning filters in efficiency range of 45 to 95 percent with atmospheric dust (NBS dust spot method). Shows efficiencies by various tests, contains design and layout data. These positive filters are easily installed and changed.—Cambridge Filter Corp.

82 Horizontal Roll Air Filter

"Conomatic" type GH horizontal roll air filter is fully automatic; comes in 225 sizes with capacities of 3340 to 66,300 cfm. Either timer or pressure-switch controlled. Pre-assembled, wired and ready to run. Underwriters listed. Equipment is described in bulletin 822-A.—Continental Air Filters, Inc.

83 Impingement-Strainer Air Filter

Technical bulletin describes "Roto Aire" RM1-IR impingement-strainer type, replaceable media air filter with integral retainer combining filter holding device and filter. May be operated at varying velocities with varying media densities and combinations. Simple, inexpensive to replace.—Burke and Co.

84 Industrial Air Filters

Booklet describes light weight, aluminum, washable RP industrial air filters. Specifically designed for industrial and commercial use. Includes information on pricing, capacities and available accessories.—Research Products Corp.

85 Industrial Filter for Critical Jobs

Bulletin 106 describes "Absolute" filter originally developed for removing radioactive materials and now widely used by industry for critical filtering jobs. Guaranteed 99.97 percent efficient on 0.3 micron particles. Light, compact, easily installed without power, flushing water or drain connections.—Cambridge Filter Corp.

When you make use of the handy reply card on pages 2-67 and 2-68 to ask for copies of the catalogs, bulletins and other data reviewed here, please type or print your name and address clearly so that the information you want can be sent you without delay. And don't forget to include your name and address on the card! Some of the cards have been returned to us without this essential information.

86 Oil Bath Air Cleaners

Catalog lists heavy duty oil bath air cleaners. Factory approved by leading American engine and equipment manufacturers. Available in sizes to fit any gasoline, diesel or natural gas engine for highway, off-highway and stationary applications.—Vortox Co.

87 Permanent Air Filters

Bulletin AD-103 features "Kleen-Kwik" dry type, permanent air filters requiring no special equipment to service. Readily interchangeable with present filters. Washes rapidly with warm water. Requires no adhesive or oil. Selection data provided. Made of all galvanized steel enclosing frames with static type media, protected by metal mesh two sides.—Air Filter Corp.

88 Plastic Fiber Air Filter Media

"Plastic Fibers as Panel Air Filter Media" is a reprint of an article discussing electrostatic effects of plastic fibers used in air filters and their value in air cleaning.—Air Filter Institute.

89 Replaceable Filter-Adsorber

Technical bulletin presents "Roto Aire" RPM1-P combination replaceable media air filter and activated charcoal air purifier, developed for slide-in filter section of any air handling unit accommodating 2 in. air filter. Filter and adsorber sections contained in single case. Features flexibility, efficiency, economy.—Burke and Co.

90 Roll Filter Machines

Literature presents line of automatic, semi-automatic, or manually operated "Micromatic" roll filter machines. Combine qualities of "Micromat" filter media with advantages of gradual, controlled filter changing. Can be installed singly, side by side, or in series according to available space and filter efficiency requirements.—Microtron Corp.

91 Strainer Type Filters

Bulletin B-1300-4A describes three HP high performance strainer-type filters employing replaceable filter cartridge. Efficiencies range from 35 to 95 percent. Light weight, flame-proof, corrosion resistant units fold five and ten to a case. Resistance characteristics, capacities, dimensions, weights, installation and engineering data.—Farr Co.

92 Treated Air Filter

Catalog describes new "Permachem" treated air filter. Points up methods whereby distributors and dealers can "put the profit back into the filter business."—Fram Aire Co.

93 Vertical Roll Air Filter

"Conomatic" type G vertical roll air filter is covered in bulletin 819A. Filter is automatic, in wide range of sizes with capacities of 5240 cfm up. Timer or pressure-switch controlled. Preassembled, wired, ready to run. Underwriters listed.—Continental Air Filters, Inc.

94 Washable Air Filter

Four page brochure gives properties and performance data of "Microfoam" washable plastic air filter, a lightweight, corrosion resistant filter medium with high efficiency and dirt-loading capacity and minimum air flow resistance, with or without adhesive.—Microtron Corp.

95 Washable Filter Panel

Featured in bulletin 372-101 is the P-61, an efficient, dry, washable filter panel for general air conditioning applications. No oils or adhesives required. Can be washed with clear water and detergent.—Air-Maze Div., Rockwell-Standard Corp.

See the index on the front cover of this supplement to Heating, Piping & Air Conditioning for the classifications of products under which this literature is listed.

Atomizing & Spray Nozzles

96 Industrial Spray Nozzles

Twenty page catalog I covers general industrial spray nozzles for spraying applications. Made of brass, stainless steel, hard rubber, stoneware or any machinable materials for humidifying, gas scrubbing, wax coating, chemical processing, cooling towers, spray drying, re-cooling.—Monarch Mfg. Works, Inc.

Cements, Adhesives, Tapes, Sealers & Lubricants

97 Adhesives, Coatings and Sealers

Twelve page catalog on adhesives, coatings and sealers for building construction. Includes adhesives for wall tile, insulation, laminates, hardboard or wallboard, gypsum drywall, vinyl and rubber tile, cove bases, wood block flooring. Describes polysulfide rubber sealers for curtain walls, masonry and prefabricated metal structures; sealers for duct systems.—Minnesota Mining and Mfg. Co., Adhesives & Coatings Div.

98 Adhesives for Insulation

New four page catalog describes adhesives for bonding insulation and insulating sealers for heating, ventilating, building, automotive, truck, trailer and railroad industries. Four typical insulation adhesives and sealer applications discussed. Properties, uses, application methods and coverage of insulation adhesives and sealers listed in chart form.—Minnesota Mining and Mfg. Co., Adhesives & Coatings Div.

99 Adhesives for Insulation

New four page catalog lists special adhesives for fast, permanent bonding of light and medium density insulation. Properties include fire retardance; resistance to heat, cold, water and humidity; long tack range; high strength and wet strength.—St. Clair Rubber Co.

100 Adhesives, Sealants and Coatings

Brochure describes tapes, adhesives, sealants and coatings used in construction industry. Gives product description, application methods, features, technical data.—Permacel.

101 Cloth Tape

Brochure gives description with application information of line of cloth tapes. Uses, product features, advantages, government specification qualification included.—Permacel.

102 Dry Film Lubricant

"Vari-Lube" dry film lubricant spray contains graphite for use on any metal-to-metal contact. Takes high and low temperatures, can withstand extreme pressure. Forms protective coating on sliding and moving parts of heat controls, brake springs, linkage, clutches, levers, draft regulators, garage doors, furnace doors, handhole and manhole gaskets.—The Tankit Co., Inc.

103 Duct Liner Adhesive

"Tuff-Bond" M-102-H duct liner adhesive has reclaimed rubber base. Strong bonding, waterproof, brush or trowel consistency. Formulated for applying duct liner and similar insulation to interior and exterior of sheet metal ducts. Used for bonding porous materials to themselves, also to non-porous materials.—Goodloe E. Moore, Inc.

104 Fire Resistant Duct Liner Adhesive

Nonflammable, fire resistant duct liner adhesive "Tuff-Bond" No. 6 meets interim Federal Standard 00136. Fire resistant when dry and nonflammable in wet state. Should be brushed out carefully on metal with wet brush. Insulation should be pressed into wet adhesive promptly, as tack time is six to eight minutes.—Goodloe E. Moore, Inc.

105 High Pressure Air Duct Sealer

High pressure air duct sealer "Tuff-Bond" No. 12 formulated to caulk and seal joints and for installing and coating tape over these joints. Has firm, tough, flexible film. Remains impervious to salt, water, heat, humidity.—Goodloe E. Moore, Inc.

106 Insulation Adhesives

Data sheet 11 lists in four pages adhesives used for insulation.—Miracle Adhesives Corp.

107 Lagging Adhesive

Literature covers "Clair Coat" water based, non-flammable, non-toxic, vermin-proof lagging adhesive. Capable of withstanding temperatures over 200 F; has low freezing point. Produces waterproof and steam resistant dried film. Applied by brush, dip or spray methods.—St. Clair Rubber Co.

108 Lap Sealing Adhesive

Literature deals with lap sealing adhesive resistant to heat up to 300 F. Fast application with no waiting for open time. Has immediate tack, quick grab for strong, permanent bond. One thin coat provides excellent coverage. Has good consistency for brushing. Perm rating: 0.05. White or tan color.—St. Clair Rubber Co.

109 Masking Tapes

Leaflet describes "Shurtape" masking tapes of various types, including general purpose, stain resistant, and high temperature. Each is engineered with special features to meet special job requirements.—Shuford Mills, Inc.

110 Penetrating Oil

Heavy duty "Eez-It" penetrating oil supplied in spray can loosens nuts, bolts, sheaves and

fittings; lubricates and frees draft regulators, louvers, etc. Works fast, prevents and cuts corrosion, dirt, paint, grease and dope with high pressure stream. No offensive odor.—The Tankit Co., Inc.

111 Sealers and Vapor Barriers

Bulletin describes sealers and vapor barriers for air conditioning and refrigeration applications which exhibit good flexibility, excellent adhesion over a wide temperature range and low odor levels. Formulations for special application requirements are manufactured to customer's orders.—Witco Chemical Co., Inc.

112 Specialty Tapes

Leaflet describes "Shurtape" specialty tapes developed and engineered for specific purposes. Eight types briefly described, including metallized paper insulation tape.—Shuford Mills, Inc.

113 Strapping Tapes

Leaflet describes "Shurtape" strapping tapes, each of which is engineered to meet special job requirements. Types shown are flatback paper, glass filament reinforced; and woven glass "Mylar" laminated strapping tape.—Shuford Mills, Inc.

114 Tapes and Adhesives Data Book

Condensed data book contains listing of tapes and adhesives, showing technical data, uses, product features, government specification qualification.—Permacel.

Controls & Instruments

115 Air Filter Gages

Bulletin C-1 presents the various types of air filter gages in standard line. Provide continuous efficiency check of all filter types. Consulting engineers specification data included for each of the three standard types of gages.—F. W. Dwyer Mfg. Co.

116 Automatic Damper Motor

Brochure announces addition of automatic damper motor to "Zon-Air" unit for increasing system efficiency and decreasing fuel and/or current costs by calling for warm or cool air where actually required. Mounts on air ducts to feed required air to each zone. Built-in auxiliary switch simultaneously starts burner and blower or cooling system.—Heat-Timer Corp.

117 Automatic Flow Controls

"Mesurflo" automatic flow controls for original equipment applications feature low pressure drop as shown on chart of new folder. Variety of flow rates available from 2/10 to 50 gpm. Six pipe sizes. Automatically compensates for pressure surge and drop to maintain one constant flow rate.—Hays Mfg. Co., Automatic Controls Div.

118 Automatic Temperature Controls

Catalog F-1753-7 lists 1961 line of automatic temperature controls. Describes electric and electronic thermostats, valves, control systems. Valves may be selected according to condensed data provided. Contact ratings for thermostats enable selection of appropriate room or bulb type.—Barber-Colman Co., Automatic Controls Div.

See the index on the front cover of this supplement to Heating, Piping & Air Conditioning for the classifications of products under which this literature is listed.

119 Cable Tracing Tester

Four page catalog CTC-1 explains newest cable tracing tester. Tells how it traces non-metallic sheathed cable and tracing with a common ground.—Pyramid Instrument Corp.

120 Contact Pyrometers

Twelve page brochure 4257 features "Pyrocon" portable contact pyrometer for fast surface temperature readings of flat or curved, moving or stationary surfaces. Shows other types of pyrometers and various thermocouples. Gives instrument, extension arm and thermocouple prices. Provides scales for pyrometers.—Alnor Instrument Co., Div. of Illinois Testing Laboratories, Inc.

121 Control Centers

Specific functions, components and benefits of "Electrionic" control centers described for engineers, contractors, architects and users in new eight page brochure F-8031. Information on graphic panels, "Selectronic" and identification control centers for commercial and industrial buildings. Remote temperature indications, recordings, control point adjustments by electric instruments discussed.—Barber-Colman Co., Automatic Controls Div.

122 Controllers

Bulletin D-4150B describes "Wizard II" controller. Presents features and principle of operation of both standard controller (type 4150) and controller with reset (type 4160). Explains all available variations of controller.—Fisher Governor Co.

123 Controls for Fan Coil Units

New guide chart shows how to combine fan coil controls in five different systems to provide con-

trol for any fan coil application. Illustrates application of each control and advantages of each control system. Includes equipment features and specifications.—Minneapolis-Honeywell Regulator Co.

124 Controls and Gages

Catalog contains prices and details on "Magnehelic" gages, manometers, air velocity meters, air filter gages, pitot tubes, pressure actuated switches, flow meters, combustion testing instruments. Diagrams, conversion curves and other technical data provided.—F. W. Dwyer Mfg. Co.

125 Controls and Instruments

New catalog 660 lists equipment for measurement and control of relative humidity, temperature, dewpoint, etc. Systems range from test-tube units to control of entire building. Includes sleet and ice alarm, "Humistat," "Hydrotector" and "Hygro-Champ" device for measuring equilibrium-humidity of paper during manufacture.—Hygrodynamics Inc.

126 Dial Thermometers

Twelve page catalog 225-D describes 3 and 5 in. bi-metal dial thermometers with stainless steel case and stem. Sockets for pipe lines, tanks and flanges for air ducts shown, prices included.—Moeller Instrument Co., Inc.

127 Dial Thermometers for Piping, Ducts

Details given in bulletin 700 on bi-metal dial thermometers for piping, ducts, etc. Straight and angle forms in 3 and 5 in. dial sizes with stems from 2½ to 24 in. long. Offered with all standard Fahrenheit and Centigrade ranges.—Weksler Instruments Corp.

128 Differential Pressure Switches

Bulletin E-40 covers differential pressure switch model 1800 capable of very sensitive actuation. Suitable for detecting filter media build-up, actuating defrost cycles, signal alarm on static pressure failures, applications involving ranges of 0.15 in. to 80 in. of water.—F. W. Dwyer Mfg. Co.

129 Direct Reading of Air Velocities

Eight page bulletin 2448 features "Velometers" for instant, direct reading of air velocities in heating systems, air conditioning and industrial hygiene. Maximum accuracy attained through individual stepping, hand drawing of all points and divisions on scale face for precision-made instrument. Describes jets; diagrams multiple range instruments. Lists accessories.—Alnor Instrument Co., Div. Illinois Testing Laboratories, Inc.

130 Flow Switches

Bulletin FSI-A describes a dependable, moderately priced type of automatic control or safety device that makes or breaks electrical circuit when flow in a pipe starts or stops. Shows wide variety of uses, such as controlling signal devices, alarms, motors, burners and metering devices. Typical use in air conditioning is detailed.—McDonnell & Miller, Inc.

131 Fluid Power Gas Valve

One power head of new V4034 commercial or industrial gas valve actuates six body sizes from 1 to 3 in. One buys only the few basic bodies and power heads needed for maximum flexibility, minimum cost. Has FM, FIA approval as shutoff valve. Specifications given in literature.—Minneapolis-Honeywell Regulator Co.

132 Gages and Needle Valves

Catalog 76-G lists line of gages for all types of industry, including heating. Detailed listings insofar as ranges and sizes, as well as line drawings giving roughing-in dimensions of all of the gages shown, are included.—Marsh Instrument Co., Div. of Colorado Oil and Gas Corp.

133 Heating Controls

Catalog G-0260 describes "Weather" controls for regulating rate and hours of heat flow for space heating as controlled by outdoor temperature. Models suitable for steam, hot water and for warm air heating in residential and large multiple occupancy buildings shown.—Automatic Devices Div., American Machine and Metals, Inc.

134 Industrial Controls

Eighty-eight page condensed catalog 608.179 features line of automatic controls for commercial and industrial plant or process requirements. Covers automatic control valves, gas valves, magnetic valves, combustion controls and instruments, warm air controls, vapor and vacuum controls, electrical components, etc.—General Controls Co.

135 Industrial Thermometer

Leaflet deals with 848 series of specialized industrial thermometers available with 8 in. scale, glass insert, bronze case, with separable socket and union swivel nut connection. Costs one-third less than regular 9 in. frame front thermometer.—The Philadelphia Thermometer Co.

136 Industrial Thermometer

Leaflet describes specialized industrial thermometer for use where space is limited. Has 5½ in. scale, bronze case. Separable slip socket type, with or without extension neck, now can be furnished at saving over conventional types.—The Philadelphia Thermometer Co.

137 Industrial Thermometers

Catalog 61-C offers range of industrial "Red-Reading" mercury thermometers. Includes information on six standard forms in 7 or 9 in. scale cases. Designed to give superior performance, they offer many special features in construction and design.—Tagliabue Div. Marshalltown Mfg., Inc.

138 Industrial Thermometers

Bulletin 3100-M includes descriptions, standard features, ranges and specifications for line of 6 in. industrial thermometers, 9 in. BX series of industrial thermometers, and the 3½ in. vapor-actuated dial thermometers. Reference guide simplifies ordering.—H. O. Trerice Co.

139 Integrating Liquid Meter

"Cadillac" liquid meter measures non-viscous, non-volatile liquids accurately from zero to full rated capacity. Has no close tolerances, maintenance is simple, known for durability. Serves gravity or vacuum systems, operates on 4 to 18 in. water head. Seven sizes, ½ to 24½ gpm.—Central Station Steam Co.

140 Liquid Burnisher Contact Cleaner

New liquid burnisher cleans and restores electrical contacts. Comes in spray can with plastic tube extension for easy application. Used on oil burners, air conditioners, gas controls, etc. Cleans relays, solenoids, brushes and breakers. Effective on high and low voltages. Prevents rust, corrosion and pitting.—The Tankit Co., Inc.

141 Liquid Level Controls

Catalog section 4A gives specifications for displacement type level system which permits differentials between operating stages as great as 150 ft. Will permit multi-stage switching in single compact unit. Units adaptable on large pressure vessels and will operate satisfactorily on dirty or surging liquids. Trim available for most chemical applications.—Magnetrol, Inc.

142 Motor Actuators

Reversible and proportional motor actuators control dampers and valves in commercial and industrial applications. Dust-tight, splashproof construction, adjustable travel limits and position indicator are standard features listed in bulletin 3230-A.—Penn Controls, Inc.

143 Pilot Operated Temperature Regulators

Stable control for instantaneous heaters and accurate control for storage heaters by pilot operated temperature regulators described in six page bulletin 1012. Contains application diagrams and capacity table for sizing main valves.—Spence Engineering Co., Inc.

144 Pipe Line, Air Duct Thermometers

Eight page catalog 400 describes 7, 9 and 12 in. scale adjustable form industrial thermometers for pipe line and air duct application. Brass, steel and stainless steel test wells shown, with prices.—Moeller Instrument Co., Inc.

145 Pneumatic Valves

Literature gives details on series of pneumatic valves providing exact valve required for any temperature control application. Contoured plug design and "Gradutrol" relay assure accurate flow control from fully opened position to critical, hard-to-control light load situation.—Minneapolis-Honeywell Regulator Co.

Advertisers in Heating, Piping & Air Conditioning have furnished these descriptions of their catalogs, bulletins, and other helpful data. Copies are available on request.

146 Pressure Gages

"Acragage" line of pressure, vacuum and compound gages offers solid front safety construction as standard feature. Catalog G gives information on such features as full area blow-out disc which permits greater ease of maintenance, and on longer bourdon tubes.—Robertshaw-Fulton Controls Co., Fulton Sylphon Div.

147 Pressure, Vacuum and Compound Gages

Catalog DH-54 describes exclusive "Helicoid" movement, which does not have gears or teeth to wear. Covers construction features and operation; styles of square and round cases; dials; calibration, adjustment and how to specify gages. Includes information on special gages and gage accessories.—Helicoid Gage Div., American Chain & Cable Co., Inc.

148 Proportional Pressure Controllers

Bulletin 3269 announces a new line of proportional pressure controllers used in commercial and industrial applications to position motors and valves to maintain desired pressure. Featured are adjustable throttling range and dust-tight enclosure.—Penn Controls, Inc.

149 Proportional Temperature Controls

Bulletin 3264 on proportional temperature controllers for positioning damper motors and valve actuators to maintain temperatures in industrial-commercial applications. Feature adjustable throttling range, dust-tight, splashproof enclosures, wide selection of scale ranges.—Penn Controls, Inc.

150 Pyrometer

Four page folder features type 2300B pyrometer for measuring low temperatures. Has double ranges of −40 to +120 F and 50 to 200 F. Also lists and diagrams various types of thermocouples. Shows other precision products; gives prices.—Alnor Instrument Co., Div. of Illinois Testing Laboratories, Inc.

151 Recording and Other Instruments

Four page specification bulletin describes pressure gages, industrial thermometers, mercury and vapor actuated dial thermometers, bi-metal dial thermometers and circular chart recording instruments for temperature, pressure, relative humidity.—Weksler Instruments Corp.

152 Recording Instruments

New 24 page catalog 625 features redesigned, expanded line of 8, 10 and 12 in. circular chart instruments for temperature, pressure, relative humidity or time-of-operation. Thermal system selection guide, mounting dimensions, other technical data.—Weksler Instruments Corp.

153 Regulators, Valves, Expansion Joints

Eight page condensed catalog 1700 presents products for building construction and maintenance, including temperature regulators, pressure regulators, radiator valves, expansion joints, etc.—Robertshaw-Fulton Controls Co., Fulton Sylphon Div.

154 Room Thermostats

New brochure F-10312 gives details and features of new line of room thermostats. Regular, medium and heavy duty types as well as room humidistats described. Both electric and electronic sensing provided, plus combination dual thermostats.—Barber-Colman Co., Automatic Controls Div.

155 Self-Operating Temperature Regulators

Bulletin 1000-M covers line of standard self-operating temperature regulators and indicating self-operating temperature regulators. Includes information and specifications on semi-steel body strainers, bulbs, mixing valves, pressure regulators, etc., with recommended temperature range combinations and connector selection data.—H. O. Trerice Co.

156 Sequence Switches

Catalog S-1059 explains use and applications of reset sequence switches. Typical applications for staging compressors, chillers, boilers or heating units at selectable temperatures or pressures shown. Differential between stages and between "make" and "break" of each stage can be held to close tolerance.—Automatic Devices Div., American Machine and Metals, Inc.

157 Side Mounting Float Switches

Catalog describes specifications for units specially designed for mounting through the sides of tanks or vessels. Units available with vaportight heads for outdoor mounting on cooling tower sumps.—Magnetrol, Inc.

158 Sleet and Ice Alarm

Literature features new sleet and ice alarm. Provides fast, economical protection against icing, freezing of antennas, gas line pumping stations, trailer-truck loading ramps. Detects icing conditions, actuates alarm and heaters before ice actually forms. Used on "Dew Line" and "White Alice Project."—Hygrodynamics Inc.

159 Smoke and Soot Control

Brochure explains elimination of smoke and cutting of fuel costs by using "Smoke-Eye" indicating alarm. Easily installed, improves combustion efficiency. Gases evaluated on smoke gage. Eliminates sooting of boiler tubes and heating surfaces.—Heat-Timer Corp.

160 Steam Condensate Meter

"Cadillac" condensate rotary meter measures steam condensate in atmospheric or vacuum systems and has high accuracy from rated capacities down to zero. This meter registers to ten million pounds, is inexpensive to maintain, is known for long life and comes in sizes from 250 to 12,000 lb per hr.—Central Station Steam Co.

161 Submarine Thermometers

"Tag" submarine thermometers are used on diesel engines, steam turbines, reduction gears, pumps, bearings, refrigeration equipment and apparatus for shipboard and industrial applications. Meet Navy specifications MIL-T-656A.—Tagliabue Div., Marshalltown Mfg., Inc.

162 Temperature, Humidity Controls

Small "Humistat" unit controls temperature/relative humidity with precision. Responds to micro-changes in RH, covers selected narrow ranges within total humidity range of 3 to 98 percent with accuracy of plus or minus 1.5 percent. Single relay unit available for control or alarm, dual relay for control and alarm.—Hygrodynamics, Inc.

163 Temperature Regulator

Bulletin 612 on new "Propo-matic" temperature regulator explains how patented double lever and characterized bleed orifice tune proportional band from 1:1 to 5:1 to match system requirements. Two moving part, no maintenance G-type body designs available in complete range of sizes, end connections and ratings.—Leslie Co.

164 Temperature Regulators

Bulletin 560 describes type T direct acting and type AT pilot operated self-contained temperature regulator, also combination pressure and temperature regulators, types PTT, PTS and PTM available in either bronze or semi-steel body with stainless steel pilot valve, main valve, seat.—O. C. Keckley Co.

165 Temperature Regulators, Pressure Control

Form SEM 9 gives details on cascade control of fast heating exchangers with wide ranging, fast changing loads by type EAT series temperature regulators with wide adjustable temperature range (200F), with over and under temperature protection. New air adjusted pilots provide accurate pressure control in vacuum range.—Spence Engineering Co., Inc.

166 Thermometers

Bulletin 356 covers line of industrial indicating thermometers particularly suited for hot and cold water lines—as well as air duct type. Adapt for separable socket or well, perforated steam bare

bulb, tilting flange or union connection. All ranges in stock for fast delivery.—Palmer Thermometers, Inc.

167 Thermometers

Catalog and specification sheets describe industrial thermometers for duct and pipe line installations. Mercury-in-glass, vapor tension dial indicating and bi-metallic actuated thermometers. Newly constructed "Vari-Angle" design permits easy installation at any angle. Scale fully visible for accurate reading.—Albert A. Weiss & Son, Inc.

168 Thermometers and Recorders

Twelve page catalog of industrial thermometers for pipe lines and air ducts, hygrometers, remote reading dial and recording thermometers, portable temperature recorders, recording psychrometers, sling psychrometers, pocket test thermometers, etc., with prices.—Moeller Instrument Co., Inc.

169 Thermostatic Radiator Valves

Thermostatic radiator valves to provide individual room or area temperature control on two pipe steam or hot water systems described in "Thermotrol" bulletin 501. Self contained, no external power source. For modernizing and inexpensive control systems for new construction. Sizes are ½, ¾ and 1 in., in all body patterns.—Sterling, Inc.

170 Voltage, Amperage Instruments

Four page catalog A654 lists line of "Amprobe" instruments and their features. Explains how instrument measures amperage, voltage and resistance.—Pyramid Instrument Corp.

171 Volt Ammeter Kits

Catalog sheet AAD-1 outlines newest addition to line of snap-around volt ammeter kits. Lists models, describes how instrument measures voltage, current and resistance. Explains use of "Amprobe Junior" with "Amprobe Energizer" to extend instrument's readings.—Pyramid Instrument Corp.

172 Zone Control Valve

Packless stem seal "Zonvalve" for positive temperature control announced in brochure. Uses electro tin-plated phosphor bronze bellows, assures permanent stem seal. Constructed for complete shut-off. Compactness permits installation in limited spaces, fits in baseboard enclosures. Available in straight, angle and three-way, ½ to 1¼ in., low voltage wiring.—Heat-Timer Corp.

Drying & Process Equipment

173 Aftercoolers for Air, Gas

New bulletin 120 describes "Paracoil" type AC aftercoolers for compressed air and gas applications; covers operating features and design characteristics, including floating tube sheet end to incorporate weep holes in retaining ring to forestall mixing of shell and tube side fluids. Capacities range from 30 to 5650 standard cfm of air.—Davis Engineering Div., Tube Reducing Corp.

174 Air Conditioning, Drying Systems

Brochure K-160A describes latest model C "Kathabar" air conditioning and drying systems for stopping condensation, speeding drying and other processing operations, obtaining sub-freezing dewpoints, making air sterile. Also covers new units for rapid drying, toasting, etc. up to 1000 F, continuous drying below 120 F, continuous cooling down to −90 F.—Surface Combustion Div. of Midland-Ross Corp.

175 Dryers

Dryers for grain seed and processing with oil or gas burners have capacities up to 25,000,000 Btu per hr. Data and description in bulletins 548, 550, 571.—Campbell Heating Co.

176 Humidity and Temperature Control

Bulletin 140 on "Hygrol" air conditioning explains means of precise manipulation of humidity and temperature for critical processes of drying, holding heat sensitive materials, using absorbent liquid to dry air at moderate temperature without refrigeration. Includes diagrams, chart of dehumidification capacities up to 20,500 cfm.—Niagara Blower Co.

177 Laboratory Sinks

Light weight, heavy duty "Durcon" epoxy resin sinks resist practically all laboratory chemicals. Easily installed. Will not crack from thermal shock. Sinks are solid castings with covered corners and bottoms dished to outlet. Overflows, outlets, traps available. Listed in bulletin PF/5b. —The Duriron Co., Inc.

178 Liquid Phase Heater

Eight page bulletin 4023 describes "Hi-R-Temp" liquid phase heater permitting temperatures to 600 F without corresponding high pressures. Gives advantages of hot oil heater systems, suggests typical industries and process applications. Provides sizes, specifications, describes features. —Vapor Heating Corp.

179 Low Temperature Dryers

Brochure K-156 on engineered drying describes new high speed, low temperature dryers for continuous processes. Replace batch operation in production of glue and gelatin, dairy products, chemicals, foods, pharmaceuticals, pigments, synthetic yarns, varnishes, etc.—Surface Combustion Div. of Midland-Ross Corp.

180 Process Equipment

Catalog 100-A covers special metal fabrications used in process equipment, scrubbers, high pressure towers, jacketed vessels, surge drums, condensers, high pressure equipment. Discusses ASME code and various construction materials for storage tanks.—Ellicott Fabricators, Inc.

181 Processing, Heat Transfer Equipment

Twenty page bulletin 16-P has product descriptions, specifications for laboratory and production blenders, vacuum tumble dryers, packaged pilot plants, process heat exchangers, new "Solids-Processor," and general purpose solids-flow valve.—The Patterson-Kelley Co., Inc.

182 Tanks, Air Receivers, Etc.

Catalog 100-A furnishes facts on materials, dimensions, sizing data for hot water storage tanks and generators, air receivers, blow-off tanks and hydro-pneumatic tanks. Provides coil sizing charts and data for hot water generator. Details about linings to stop corrosion.—Ellicott Fabricators, Inc.

Dust & Fume Collection

183 Exhaust System for Fumes, Smoke

Bulletin 650 automotive R6-60 describes and gives selection data for overhead and underfloor exhaust system for car, truck and welding fumes. "Swing-O-Way" units for removing diesel and spot welding smoke use a retractable tubing up to 6 in. diameter which permits 180 deg swing range.—Ammerman Co., Inc.

184 Industrial Vent Pipe

Twenty page brochure TR-237A tells architects and engineers of industrial plants the cost saving advantage of "Transite" pipe in venting industrial gases, mists, fumes and dusts. Gives sizes, dimensional data on pipe, couplings and many fittings available.—Johns-Manville.

185 Oil Mist and Fume Collector

Bulletin 251C describes new model B "Electro-Mist" electronic oil mist and fume precipitator. Self-contained precipitator collects oil mist and fumes and returns cleaned air directly to work areas, preventing loss of heated exhausted air to outside. Construction and operational data provided.—American Air Filter Co., Inc.

Electric Heat

186 Electric Ducted Warm Air Heating

Electric ducted warm air heating folder describes benefits of ducted installation if electricity is choice of fuel. Also covers unique unit with positive sequence timer.—Janitrol Heating & Air Conditioning, A Div. of Midland-Ross Corp.

187 Electric Hot Water Boiler

An electric hot water heating boiler for all types of hot water heating systems is described in a four page bulletin. Supplies hot water from 60 to 250 F for domestic use or processing.—Precision Parts Corp.

188 Electric Hot Water Boiler and Booster

Electric hot water heating boiler for all types of hot water heating systems for industrial and large buildings. Can be used as a hot water booster for restaurants, self-service laundries, etc. Supplies hot water from 60 to 250 F. Details in bulletin.—Precision Parts Corp.

189 Electric Cabinet Heaters

Bulletin E403 presents details on electric cabinet heaters. Designed for maximum flexibility of arrangement and operation. Available for floor, ceiling, wall or inverted mounting, non-recessed, semi-recessed, fully recessed or concealed installations.—John J. Nesbitt, Inc.

190 Electric Unit Heater

Bulletin 1060 describes horizontal type suspended electric unit heater in sizes from 5 to 25 kw with 208, 240, 277 and 480 volt service. Steel fins bonded to steel tubes encase nichrome wires embedded in dielectric magnesium-oxide. Has built-in overheat control, resiliently mounted motors, safety fan guard. Corrosion resistant casing.—Modine Mfg. Co.

Fans, Blowers, Ventilators

191 Airfoil Bladed Fans Selection Guide

Sixty page selection guide A-105 gives detailed engineering data on new line of AMCA rated Design 10 airfoil bladed fans for general ventilation, air conditioning systems and industrial applications. Capacity tables color coded to match any operating condition. Output curves, dimensional drawings, other useful data included.—Chicago Blower Corp.

192 AMCA Certified Products

Official directory 261-A lists products licensed to carry AMCA certified performance ratings seal. Contains product identification data on more than 5000 centrifugal, axial and propeller fans, and power roof ventilators. Includes manufacturer, unit size, trade names, model numbers, and latest catalog number and publication date.—Air Moving and Conditioning Association, Inc.

193 Air Moving Test Code

New standard test code (bulletin 210) establishes uniform methods for testing all types of air moving equipment in accordance with AMCA certified ratings program. Provides more accurate data on which to base equipment performance ratings. Features nozzle test methods, compressibility factors and other significant engineering advances.—Air Moving and Conditioning Association, Inc.

194 Aluminum Centrifugal Exhausters

"Vent-X-It" direct or belt driven spun aluminum centrifugal exhauster offers volume ventilation with streamlined styling. "Airphlo," direct or belt driven standard galvanized steel or aluminum centrifugal exhauster, provides quiet operation for volumes from 5568 to 57,541 cfm.—Octagon Ventilator Mfg. Co.

195 Aluminum Ventilators

Catalog lists line of all aluminum ventilators. Contains specifications, dimensions and ratings for manufacturer's roof ventilators and fans.—Loren Cook Co.

196 Axial Flow Duct Fans

Easily installed in any system, axial flow duct fans, described in bulletin AF-2, operate efficiently, quietly; need minimum maintenance. Standard four-bladed propellers are nonoverloading in all sizes: 20 to 40 in. Direct drive: ¼ to 20 hp; 4000 to 48,500 cfm. Belt drive: 1/3 to 20 hp; 4300 to 48,500 cfm.—Bowman Steel Corp.

197 Axial Flow Fans

Bulletin AFF-61 describes axial flow fans, arrangement 9, vaneaxial type and arrangement 4, vaneaxial and tubeaxial types. Features include airfoil fan wheels, heavy gage casings, sealed and pre-lubricated bearings. Capacities at zero static pressure range from 3220 to 72,500 cfm.—L. J. Wing Mfg. Co., Div. of Aero Supply Mfg. Co., Inc.

198 Axial Roof Ventilators

Catalog DS-364A covers axial roof ventilators for either supply or exhaust duty industrial application. Hooded and vertical discharge, direct and belt driven units. Wheel diameters 24 through 48 in.; cfm to 43,200.—The Trane Co.

199 Belt Drive Power Roof Exhausters

Bulletins 60-CK, 60-AK describe new "Key-Line" spun aluminum, belt drive, centrifugal and axial exhausters for heavy duty service. Low contour, motor and drive mounted to side out of air stream. Automatic belt tightening device, non-overloading centrifugal wheel are features. Nine sizes, 212 models, capacities 725 to 27,000 cfm.—Jenn-Air Products Co., Inc.

200 Belted Ventilating Sets

New catalog 410 describes and gives specifications of non-overloading type BVB belted ventilating sets. Twelve sizes, all discharges, outdoor or indoor installation. Includes simplified rating tables, detailed performance and general dimensional data for selection of proper unit for quiet, efficient operation.—Barry Blower Co.

201 Blowers

Catalog 395 shows line of forward curve, direct drive and high speed blowers. Applications, construction features, performance data, dimensions, special features, capacities and custom features given. Recommended duct connections. Sales representatives listed.—Peerless Electric Div., H. K. Porter Co., Inc.

202 Cfm Calculator

"Ventalog" slide rule facilitates calculation of proper cfm requirements for various room areas. Easily used with performance charts in manufacturer's literature. Rate of air change chart included for 53 different types of spaces.—Penn Ventilator Co., Inc.

203 Centrifugal Fans

Bulletin 400B covers performance data on line of SWSI-BBC non-overloading centrifugal fans available in 19 sizes, all arrangements and discharges, and in classes I and II.—Barry Blower Co.

Be sure to include your name and address when you use the reply card to request copies of these bulletins.

204 Centrifugal Fans

Bulletin 70 covers line of centrifugal fans for heavy duty industrial and commercial air conditioning, heating, ventilating and refrigeration systems. Twelve sizes from 8⅛ to 32½ in. diameter, 400 to 46,000 cfm circulating capacity. Includes performance tables.—Marlo Coil Co.

205 Centrifugal Fans Selection Guide

Fifty-six page bulletin C-104 provides engineering data on new line of AMCA rated centrifugal B fans. New backward curve wheels have non-overloading power characteristic over the operating range. Color coded capacity tables, output curves, dimensional drawings, etc. to aid proper fan selection.—Chicago Blower Corp.

206 Centrifugal Roof Ventilators

Bulletin CV61 describes new line of extruded aluminum "Centridyne" roof ventilators. AMCA certified ratings. Engineered to harmonize with new linear design concept of modern architecture. Feature low overall height and compactness. Exhaust horizontally to minimize roof deterioration. Feature high efficiency, quietness.—Western Engineering & Mfg. Co.

207 Cooling Tower and Cooler Fans

Four page bulletin 306 explains design, construction and assembly features of "Aeromaster" fans for cooling towers and radiator-type coolers. High thrust factors of advanced airfoil design and advantages of adjustable pitch angle of blades described.—Koppers Co., Inc.

208 Direct Drive Pressure Blowers

Bulletin 603 describes line of direct drive pressure blowers designed for the high pressure requirements of industrial combustion, cooling, conveying and process systems. These compact, trouble-free units deliver from 100 to 8200 cfm at pressures ranging from 8 to 32 oz per sq in.—The New York Blower Co.

209 Duct Fans

Catalog DB-37-55 describes "Bifurcator" split-housing fan. Hot, corrosive, flammable fumes bypassed around motor. For fast, easy inspection, entire fan and motor assembly slides out on rails. Data on fan laws and static pressure, velocity pressure and friction provided.—DeBothezat Fans Div., American Machine and Metals, Inc.

210 Colored Fiber Glass Fan Housings

Two page bulletin FG-101 describes new fiber glass fan housing in color for "Hyduty" roof exhaust fans. Details on available colors, permanence, maintenance-free installation, sound insulation, styling, strength, construction and guarantee given.—Davidson Fan Co.

211 Commercial Kitchen Exhauster

Bulletin RGX-60 describes the "Rangex" centrifugal roof exhauster that dissipates kitchen fumes and grease away from buildings. Importance of this unit and specific applications outlined. Sizing and capacity tables included, with resume of protective safety accessories.—Penn Ventilator Co., Inc.

212 Continuous Flow Ventilator

Catalog lists model CV continuous molded fiber glass ventilators for ridge or flat roof. Made in contemporary design, architectural flexibility. Positive acting and weather resistant. Made in 12 standard colors. Accessories available. Throat sizes 6 to 48 in.—Williams-Bermuda Corp.

213 Direct Drive Power Roof Exhausters

Bulletin 58-B describes CR and AR centrifugal and axial direct drive power roof exhausters and CW direct drive wall exhauster with capacities 170 to 5750 cfm. Exclusive U-spring suspension minimizes vibration noise, guaranteed for life of fan. Performance and dimensional data, electrical characteristics, curb cap mounting diagrams.—Jenn-Air Products Co., Inc.

214 Fans

Revised bulletin F-104-A gives specifications on BL fans with backward curved bladed wheel. Capacities range to 500,000 cfm. Available in class I and II construction. Options include variable inlet vanes, outlet dampers, floating bases, high temperature models and special coatings and metals for corrosive fumes.—Buffalo Forge Co.

215 Fans and Blowers

Bulletin 54 is a general descriptive brochure on manufacturer's products, including centrifugal fans for both general and industrial installation.—Barry Blower Co.

216 Fan Sets

Line of "Ready Units" — V-belt driven, ready-to-run fan sets — is covered in 36 page catalog 517. These units are for volumes to 25,000 cfm, for static pressures through 2½ in., and for clean air up to 300 F. Dimensions and capacity tables included. — Clarage Fan Co.

217 Fans for Quiet Operation

Bulletin 592 describes the "AcoustaFan" which features a "Flow-Nozzle" air foil wheel designed for quiet operation in capacities of from 6000 to 220,000 cfm, static pressures 3 in. wg through 11 in. wg. Quiet zone selection tables make an automatic selection of the quietest possible fan.—The New York Blower Co.

218 Fire and Explosion Protecting Skylight

"Pyrojector" skylight combines illumination with emergency fire and explosion relief. Big fiber glass damper panels provide high level, glare-free illumination. Dampers fly open automatically in fire or explosion, limiting damage by venting smoke and searing gases through 28 sq ft of free escape area. Catalog available.—Swartwout Fabricators, Inc.

219 General Purpose Fans

Bulletin 602 covers line of direct and belt driven packaged fans capable of delivering from 160 to 19,000 cfm at static pressures up to 2 in. Easy to install and maintain, these units are available with weather cover for outdoor installation.—The New York Blower Co.

220 Gravity Roof Ventilators

Bulletins cover "Siphon," "Junior," "Air-In," "Lo-X-It," "Heat-X-It," and "Ridgevent" gravity roof ventilators. Provide weatherproof opening with pleasing architectural design for induced draft operation.—Octagon Ventilator Mfg. Co.

221 Gravity Ventilator

Folder lists specifications, dimensions and describes gravity ventilator. Explains how to compute gravity ventilator requirements.—Loren Cook Co.

222 Heating, Ventilating Equipment

Catalog DB7-102 describes major lines of heating and ventilating equipment: propeller fans, centrifugal fans, power roof ventilators, unit heaters. Newly designed units include types BU and FU "Util-A-Sets," type PF (direct-drive) and PFM (belted) square panel propeller fans. Performance, construction and dimensions listed.—Ilg Electric Ventilating Co.

223 Heavy Duty Fans

Type AF heavy duty "Dynafoil" fans, featuring a perfected airfoil blade design, are described in catalog 859. This equipment is especially suited to conduit type air conditioning, mechanical draft, industrial processes, tunnel ventilation, and similar applications.—Clarage Fan Co.

224 Heavy Duty Ventilators

Built for heavy duty, industrial and commercial, "Louvair" ventilators, described in bulletin LV-2, deliver air efficiently; minimize maintenance, operating costs. Capacity and data tables. Fan diameters: 12 to 60 in. Hp: 1 to 10. Capacities: 960 to 47,300 cfm. Includes penthouses with low silhouette pressure outlets for maximum air flow.—Bowman Steel Corp.

225 High Capacity Roof Exhaust Fans

Four page brochure SS-101 describes new low velocity, high capacity SS roof exhaust fans. Contains dimension table and diagram, capacity table, typical specification, installation photos.—Davidson Fan Co.

226 High Velocity Air Jets

Bulletin DH 42-56 deals with "HY-V" air jets which shoot cool air 74 ft without ducts with velocities up to 5780 fpm. Effective for cooling men, materials, machinery. Flexible mounting depresses 45 deg, swings left and right. Construction details, certified capacities, dimensions, typical applications listed.—DeBothezat Fans Div., American Machine and Metals, Inc.

227 Induced Draft Fan

Catalog DB-44-56 describes induced draft "Bifurcator" which provides instant, adequate draft. Eliminates stacks. Has direct motor drive, no belts. Entire fan and motor assembly slides out on rails for inspection. Contains boiler code ratings, selection data, dimensional drawings.—DeBothezat Fans Div., American Machine and Metals, Inc.

228 Induced Draft Fans

Bulletin L-3 describes line of centrifugal induced draft fans. Rating tables shown at 600 F, dimension data and construction material specifications. Recommends sizes of fans for oil, gas or coal fired boilers. Includes data on typical installations.—Lehigh Fan & Blower Div., Fuller Co.

229 Induction Unit Data Sheets

Specifications for all induction units used for heating, venting, exhausting and material handling given in data sheets. Flow factors indicated for oil, gas, coal and incinerators. Basic specifications in tabular form include sizes 6 to 30 in., recommended vertical installation, horizontal connections, dimensions of each unit, motor performance, blower diameter.—Quickdraft Corp.

230 Industrial Fans

Condensed industrial fan catalog 259 gives capacities, sizes and wheels on 12 fans for applications covering air conditioning, heating, fume or high temperature exhausting, dust or material handling, induced or forced draft, roof ventilation, high velocity ventilation and general ventilation.—Chicago Blower Corp.

231 Industrial Fans

Bulletin L-5 describes line of industrial fans. Includes tables, specifications, drawings. Rating tables show air volumes, rpm, hp at static pressures, and outlet velocity and velocity pressures, also correction ratios and fan laws.—Lehigh Fan & Blower Div., Fuller Co.

232 Industrial Fans

Fifty-two page catalog DS-349 describes industrial fans for exhaust, circulating and air conveyor systems. Complete, factory assembled units available in 11 sizes from 11 to 37 in. inlet diameter in five arrangements. Wheels in three types: fume removable; granule-conveying; long strand, or fibrous material.—The Trane Co.

Advertisers in Heating, Piping & Air Conditioning have furnished these descriptions of their catalogs, bulletins, and other helpful data. Copies are available on request.

233 Industrial Fans, Blowers

Catalog 340 covers commercial and industrial fans and blowers. Presents exhaust fans, duct fans, smaller direct drive pressure type and utility type blowers, roof ventilators and penthouses. One page devoted to larger centrifugal type blowers. Performance data, dimensions, other operating data. Sales representatives listed.—Peerless Electric Div., H. K. Porter Co., Inc.

234 Intake and Relief Ventilators

Catalog covers model MC molded fiber glass intake and relief roof ventilators, square or rectangular, of contemporary design, efficient, having low profile. Weather resistance coupled with architectural flexibility. Made in 12 standard colors. All climate housing reduces maintenance. Accessories available. Sizes 10 to 60 in.—Williams-Bermuda Corp.

235 Large Volume Ventilators

Catalog 1061 gives application data for "Acousti-Vent" auditorium units for use in school auditoriums, gymnasiums, multi-purpose and large area rooms where quiet air handling is desired. Features, selection and dimensional data included.—Schemenauer Mfg. Co.

236 Low Profile Ventilators

Twelve page bulletin SPV-12-D describes spun aluminum direct drive and V-belt drive "Centriflow" fan ventilators. Detailed drawings included with application, design, construction and performance data. Dampers, sub-bases, prefabricated curbs and gravity relief ventilators also shown.—The Burt Mfg. Co.

237 Centrifugal Power Roof Ventilators

Eight page bulletin DB3-200 features type L-CRF centrifugal power roof ventilators for exhaust applications up to 2 in. static pressure. Data added on four larger sizes with capacities up to 27,290 cfm. Details backward curved airfoil design blades, direct-connected drive, motors, accessories, pertinent specification data.—Ilg Electric Ventilating Co.

238 Power Roof Ventilators

Bulletin PRV-60 describes "Jet" line of power roof ventilators available in two interchangeable discharges — straight through and mushroom top. Magnetic damper locks prevent chatter, rubber lip rings make unit leakproof. Ten fan and 12 motor sizes from 600 to 51,000 cfm.—L. J. Wing Mfg. Co., Div. of Aero Supply Mfg. Co., Inc.

239 Propeller Exhausters

"Aeromatic" exhauster, direct or remote belt driven, provides high velocity expulsion of contaminated air high into air for dissipation. "Air-X-It" and "Louvent" exhausters provide volume exhaust or air intake with practically silent operation. Duct or wall fans furnish volume exhaust for duct or side wall applications.—Octagon Ventilator Mfg. Co.

240 Propeller Fans

Catalog 280 on propeller fans for commercial and industrial use. Application data, general construction features, custom features, motor ratings, fan ratings, performance data, dimensions. Covers horizontal "Ventilattic" fans, wall and ceiling shutters and penthouses. General ventilation data provided with drawings on right and wrong way to make duct connections. Sales representatives listed.—Peerless Electric Div., H. K. Porter Co., Inc.

241 Propeller Fans

Twenty-eight page catalog DS-348P describes propeller fans for commercial and industrial applications. Available with rugged, heavy duty wheels for pressure requirements up to 1 in. of water. General ventilation and exhaust wheels for industrial process. Nine types of fans and 266 combinations.—The Trane Co.

242 Restaurant Ventilating Equipment

Catalog gives descriptions, specifications and ratings of ventilating equipment for restaurants plus engineering data for determining air moving requirements.—Loren Cook Co.

243 Roof Exhaust Fans

Four page bulletin PC-101 features new "Pleasing Contour Hyduty" roof exhaust fans. Contains dimension table and diagram, capacity table, cut-away view, typical specification, installation photos.—Davidson Fan Co.

244 Roof Ventilating Equipment

Industrial and commercial roof ventilating equipment of gravity and powered axial types. Gravity ventilators include continuous ridge, unit, stationary, rotating and directional. Axial types include horizontal and vertical discharge. Low silhouette horizontal exhausters prevent roof deterioration. Low silhouette vertical exhausters discharge high to prevent re-entry.—Western Engineering & Mfg. Co.

245 Propeller Power Roof Ventilators

Specification data on line of direct-driven low silhouette types LSQ and SRQ propeller power roof ventilators for exhaust and supply ventilation in new eight page bulletin DB3-100. Describes features, including direct-connected drive, quiet operating type Q wheel, all weather construction, accessories.—Ilg Electric Ventilating Co.

246 Roof and Wall Exhausters

Bulletin 100-60 covers line of spun power and gravity roof and side wall exhausters under the trademark "AirXpeler," and "AirMpeler" line of belt-driven units, "HiBoy" and "LoBoy" units of backward curve centrifugal design, along with fabricated gravity ventilators.—Ammerman Co., Inc.

See the index on the front cover of this supplement to Heating, Piping & Air Conditioning for the classifications of products under which this literature is listed.

247 Rooftop Air Handling Unit

New "Twinalator" rooftop unit for simultaneous handling of both supply and exhaust using a single impeller is described in bulletin 552. Requires only one motor, one opening; no separate make-up air unit necessary. Unique, patented dual function air handling for all types of buildings.—Clarage Fan Co.

248 Round Fiber Glass Ventilator

Catalog lists round contour molded fiber glass model RC roof ventilator of contemporary design, made in 12 architectural colors. Positive acting, is completely weather resistant. Complete accessories: sizes 12 to 48 in.—Williams-Bermuda Corp.

249 Round Power Ventilators

Bulletin RPV-2 describes standard power ventilators combining full-time gravity exhaust with powered ventilation, discharge upward for maximum efficiency. Capacities 995 to 100,800 cfm; ⅛ to 15 hp. Data on materials, drives, fans, motors, engineering service. Also lists automatic power ventilators: high velocity air and smoke removal for heavy industry.—Bowman Steel Corp.

250 Stationary Gravity Ventilator

"Omega" gravity ventilator described in brochure OM-60. Engineered and built-in weather protection of unit is outlined. Performance and dimensional tables presented.—Penn Ventilator Co., Inc.

251 Sound Control Curb

QT sound control curb, new prefabricated, self-flashing unit for replacing conventional power exhauster curbs, described in bulletin 601-SC. Reduces exhauster sound power at inlet 90 percent, decreases air moving efficiency only 10 percent. Available for direct drive and belt drive units.—Jenn-Air Products Co., Inc.

252 Translucent Gravity Ventilators

Fifty-four page catalog and engineering data 60-1 on "Air-X-Hauster" and "Powair-X-Hauster" gravity and power ventilators. Includes square, rectangular, low silhouette models with translucent top available, making combination ventilator and skylight; specifications; capacity tables; test data; installation hints; wind velocity tables for U.S.; selection charts; other data.—The G. C. Breidert Co.

253 Wall Louvers

Eight page bulletin SPV-17-B-158 describes wall louvers. Shows general purpose adjustable type, fixed type, combinations and automatic louvers. Economical production line standard sizes listed, as well as size modifications. Construction and dimensions, screens and louver operators also treated.—The Burt Mfg. Co.

254 Ventilator and Skylight

New "Lite-'n-Aire" ventilator combines skylighting with high volume gravity ventilation. Strong, translucent fiber glass dampers and top gutters transmit soft, diffused light with dampers open or closed. Can be used with egg-crate grilles for commercial installations. Light transmission charts, air capacity tables, dimensions and technical information given in catalog.—Swartwout Fabricators, Inc.

255 Ventilators, Wall Louvers

Sixteen page bulletin SPV-101-1-60 contains condensed presentation of line of roof ventilators and wall louvers. Describes each type, design and structural features, gives performance and dimension data. Bases, fans, dampers and controls also described.—The Burt Mfg. Co.

Fuel Burning, Stacks & Vents, Draft

256 All-Fuel Chimney

Eight page bulletin RS-1A gives application, installation and specification information on durable, attractive, fire clay tile-lined, factory built, residential chimney. Now available with metal brick imprint housing, as well as asbestos cement. Included are drawings and charts with product application data.—Van-Packer Div. of The Flintkote Co.

257 Ash Handling for Smaller Plants

Four page brochure describes new, economical "Econo-Ash" pneumatic ash handling system for smaller coal fired plants, producing 2 to 10 tons of ash daily. Provides clean, rapid disposal with labor savings, features previously available only in systems for larger power plants.—Allen-Sherman-Hoff Co.

258 Atmospheric Gas Burner

Bulletin B8 describes the "Kinetic" gas burner and gives information on how to select burner size, automatic operating controls, combustion safeguard and control valves. Charts and diagrams.—Webster Engineering, Div. of Midland-Ross Corp.

259 Barometric Draft Control Handbook

Twenty page handbook and installation guide for barometric draft control explains why draft must be controlled, where to install a draft control, selecting the right size, how to install, and use of instruments in setting a control. Detailed information on several controls included.—Field Control Div., Conco Engineering Works, Inc.

When sending your requests, please be sure to type or print your name and address clearly.

260 Burners and Draft Inducers

Catalog presents line of gas, oil and combination gas and oil burners. Exclusive integral draft feature combines induced and forced draft for complete control of both combustion air and over-the-fire draft with adjustable dampers. Literature also available on line of automatic draft inducers for smoke pipe installation.—Tjernlund Mfg. Co.

261 Chimney Cap and Vent Cap

Chimney cap has stainless steel finish to add long service life. New line of inexpensive vent cowls for gas and oil fit all types of vents. Attractive models available in galvanized and crinkle aluminum finishes.—Walker Mfg. & Sales Corp.

262 Combination Oil and Gas Burners

These burners enable use of either fuel as price and convenience dictate. A flick of the switch makes the change-over from one fuel to the other. This switch can be controlled either manually or automatically. Produces real fuel economies. Available in nine sizes for every heavy-duty need.—S. T. Johnson Co.

263 Combustion Safeguard Control Centers

Twenty page bulletin C11 describes nine custom-engineered control centers and systems for combustion safeguard and automation. The starting sequences and design data are tabulated for each system and range up to a three boiler system with a combined steam flow of about 200,000 lb per hr.—Webster Engineering, Div. of Midland-Ross Corp.

264 Commercial, Industrial Burners

Bulletin 1255 describes fuel burning systems for heating, power and process requirements. Covers air or air/steam atomizing burners and partial premixing gas burners. Burner arrangements shown. Fuel consumption ranges from 20 to 300 gph on oil and 3000 to 40,000 cfh on 1000 Btu gas.—Orr & Sembower, Inc.

265 Commercial, Industrial Manual

New manual offers specifications, prices, and installation and servicing data on latest commercial, industrial gas and dual fuel conversion burners, commercial cast iron boilers, and gas propeller and blower type unit heaters.—Roberts-Gordon Appliance Corp.

266 Commercial, Industrial Oil Burners

Bulletin 1 covers commercial—industrial "Hev-E-Oil" burners for Nos. 4, 5, or 6 and P.S. 300 oils. Models from 1 to 150 gph. Low pressure, air atomizing, electric ignition, low fire start, furnishes all air for combustion, factory fire tested, Underwriters approved.—Industrial Combustion Inc.

267 Control of Draft

Specifications and information for architects, engineers and contractors covering industrial heating and processing equipment applications are given in 12 page bulletin.—Field Control Div., Conco Engineering Works, Inc.

268 Draft Regulators

Literature describes new dual purpose draft control; single acting for solid fuels, double-swing for gas.—Walker Mfg. & Sales Corp.

269 Firebox Draft Control Systems

Four page form 608. 438 lists firebox draft control systems for large gas, oil, coal burners or other combination boilers and furnaces. Describes advantages of precision instruments functioning with reliable accuracy. Costs relatively little to install and maintain. Individual instruments designed for flush or surface mounting.—General Controls Co.

270 Firing Equipment

Form 6503 outlines commercial-industrial gas, oil, gas-oil and coal firing equipment. Includes recently developed series 33 firebox package generator and several new types of burners.—Iron Fireman Mfg. Co.

271 Flame Safeguard Combination

R478A electronic flame safeguard programming control and C7012A "Ultra-Vision" flame detector combine to provide safety control system for commercial-industrial applications. FM, UL approved. Senses only actual flame, not hot refractory. For single or multiple burners. Specifications given in literature.—Minneapolis-Honeywell Regulator Co.

272 Forced Draft Burners

Forced draft "Package" burners provide smooth, efficient operation regardless of stack conditions, firebox pressures. Come completely assembled, wired, tested ready to install. Powered by No. 53 burners in sizes 28 to 560 hp. Models for oil, gas, or combination oil and gas firing. Produce maximum efficiency at minimum fuel cost.—S. T. Johnson Co.

273 Forced Draft Gas Burner

Bulletin B14 gives information on seven sizes of "Dynetic" packaged forced draft gas burners from 800,000 to 3,200,000 Btu/hr. Also covered are special features available to meet local design or code requirements.—Webster Engineering, Div. of Midland-Ross Corp.

274 Fuel Economizers

New catalog FC-2100 describes fuel economizers for eliminating smoke and reducing oil, coal and coke heating expense as much as 25 percent. Preheats secondary intake air up to temperature from 400 to 875 F. Produces hotter fire to burn fuel and combustion gases without waste, smoke, soot, carbon deposits or related maintenance expense.—Farris Engineering Corp.

See the index on the front cover of this supplement to Heating, Piping & Air Conditioning for the classifications of products under which this literature is listed.

275 Fuel Oil Preheaters

Catalog 64 deals with fuel oil heaters for preheating fuel oil, in wide combination of styles, using shell or tube circulation, steam or boiler water heat transfer.—General Fittings Co.

276 Fuel Oil Pump and Heater Units

Custom built, self-contained fuel oil pump and heater sets for use with oil burning installations described in catalog 60-2. Type S for steam atomizing with oil pressure to 150 psig, type M for mechanical atomizing with pressures to 300 psig. Wide range of types and sizes available.—Faber Engineering Co., Inc.

277 Fuel Oil Pumping and Heating Units

Bulletin 40 gives details on fuel pumping and heating units for preparing and delivering heavy fuel oil at proper pressure and temperature for oil burning systems. Capacities 1 to 75 gpm or 7000 to 540,000 pph of steam. Single or twin, electric or steam drive. Also built to specification.—National Airoil Burner Co.

278 Full Line Catalog

1961 full line catalog presents specifications and prices on deluxe quality domestic and industrial gas and dual fuel conversion burners, gas and oil boilers and furnaces, gas unit heaters, vented gas space heaters, outdoor gas lamps and central air conditioning equipment.—Roberts-Gordon Appliance Corp.

279 Gas and Combination Gas-Oil Burners

Bulletin 2 describes commercial—industrial "Hev-E-Duty" burners for natural, LP, or combination gas and oils from No. 2 to No. 6. Gas ratings from 720,000 to 21,000,000 Btu maximum input, oil ratings from 1 to 150 gph. Fully automatic, electronic safety controls, furnish all air for combustion, factory fire-tested.—Industrial Combustion Inc.

280 Gas Pressure Regulators

Six page catalog 608.339 features V300 series low pressure gas regulators for all commercial fuel gases. Provide high capacity, close regulation and excellent lock-up with wide selection of outlet pressure ranges. Maximum ambient temperatures of 200 F. Bodies of rugged cast aluminum.—General Controls Co.

281 Hopper and Bin Feed Stokers

Six page bulletin describes industrial, commercial and domestic stokers in 56 models with capacities of from 150 lb per hr through 750 lb per hr. Includes drawings and specification tables.—The Will-Burt Co.

282 Horizontal Rotary Burners

Sixteen page bulletin 50 and specification sheets cover commercial and industrial, automatic, and combination oil-gas burners. Full automatic burners with single or dual gas-electric ignition. Basic manual control pump types. Combination burners equipped with single or dual gas-electric ignition and electronic controls. Sizes 4 to 200 gph.—Enterprise Burners, Adel Div., General Metals Corp.

283 Infra-Red Conversion Burner

Folder discusses economical "Freeman Burdett" infra-red gas conversion burner. Provides more even temperatures due to heavy, ceramic center which absorbs residual heat to be given off during the off-firing period.—Illinois Iron & Bolt Co., Heating Div.

284 Logic of Stoker Heating

Twelve page brochure discusses stoker-fed coal heating in schools, public buildings and institutional buildings. Contains comparative cost data, reporting heating costs with competitive fuels in actual, large metropolitan school district.—The Will-Burt Co.

285 Oil Burner Nozzles, Accessories

Twelve page catalog O lists stainless steel, domestic high pressure gun type oil burner nozzles and air mixing equipment, industrial burner nozzles for handling bunker C oil of both air operated and direct pressure mechanical atomizing models in simplex and variable capacity types.—Monarch Mfg. Works, Inc.

286 Oil and Gas Burner Equipment

Catalog 54-1 covers wide range steam and mechanical fuel oil burners. Multi-port high velocity steam atomization for boilers with large load fluctuations. Mechanical burners available for boilers with small load fluctuations. Combination oil and gas burner units, fuel oil burners for pulverized coal burners to 1000 gph.—Faber Engineering Co., Inc.

287 Packaged Burner

Catalog 59-1 deals with integrated AF packaged burner-blower with axial flow, V-belt driven Nema 1750 rpm motor. Wide range fuel input by steam atomizing or mechanical burners using Nos. 4, 5, or 6 fuel oil and/or fixed ring gas burner. Has electric driven combustion control with oil immersed gears, flame safeguard.—Faber Engineering Co., Inc.

288 Packaged Firing Units

Bulletin 28 covers packaged firing units for oil or gas-and-oil, steam atomizing type, capacities 60 to 250 gph in standard units and to 500 gph in special units. Fully automatic, featuring electronic controls for safety, clean combustion over wide operating range; quiet, reliable, efficient operation.—National Airoil Burner Co.

WHEN USING REPLY CARD

When you use the reply card on pages 2-67 and 2-68 to request the literature you want, please circle clearly the corresponding item number on the card for each catalog or bulletin to be sent to you.

289 Packaged Oil Burner

Bulletin 100A offers details on type C-45 packaged oil burner for Nos. 4 or 5 fuel oil. Pressure atomizing type. Models for natural draft or pressurized boilers. Capacity range 10 to 30 gph. Features simplicity, good combustion, quiet operation, reliability, ease of maintenance.—National Airoil Burner Co.

290 Pneumatic Ash Handling Data Sheet

Four page data sheet Z-1 describes "Ashvac" steam jet pneumatic ash handling system for plants producing 10 or more tons of ash daily. Contains design, construction and operational information on system and components. Typical installation shown with alternate equipment arrangements to suit specific plant requirements. —Allen-Sherman-Hoff Co.

291 Saddle Mount Draft Inducers

New saddle mount simplifies industrial installations of draft inducers.—Walker Mfg. & Sales Corp.

292 Self-Clearing Coal Conveyor

Four page bulletin describes power-reversing coal conveyor. Drawings show typical installations with single or dual discharge, and horizontal cross feed tandem operation.—The Will-Burt Co.

293 Smokestacks

Bulletin IS-55 on UL-listed factory built, low cost, insulated refractory smokestack for commercial and industrial application to incinerators, boilers, furnaces. Product information, application data, drawings, engineering and mechanical data provided. Typical specifications for models HT and BF included.—Van-Packer Div. of The Flintkote Co.

294 Tank Suction Heater for Fuel Oils

New 12 page bulletin 60J-1 describes "Paracoil" heaters for conditioning fuel oils from tank storage. Design features and operating advantages for above and below ground installation given with tables of dimensions, weights, capacities and ordering suggestions.—Davis Engineering Div., Tube Reducing Corp.

Gaskets & Packing

295 Asbestos Sheet and Gaskets

Eight page catalog describes single formula material that can be used wherever asbestos sheet gaskets are applicable. Lists over 120 different chemicals with which it can be used with proved safety, and includes a table of sheet sizes carried in stock. Gives prices and dimensions of cut gaskets in various types and sizes.—Durabla Mfg. Co.

Hot Water & Steam Equipment

296 All-Fuel Boiler

Eight page brochure provides technical data on A-7 boiler designed for all fuels. Covers ratings and dimensions, recommended piping, sample specifications. Has net IBR ratings from 649,000 to 1,667,000 Btu per hr.—American-Standard Plumbing and Heating Div.

297 Boiler-Burner Packaged Units

Catalog sheets VM and HZ tell how newly designed "Heat Servant" boiler units cut down hot water supply costs or hot water heating costs. Available in many sizes. Can be fired on oil only, gas only, or combination oil and gas.—S. T. Johnson Co.

298 Boiler Water Level Controls

Catalog includes descriptive material and specifications for line of boiler water level controls for steam pressures up to 1668 lb per sq in.—Magnetrol, Inc.

299 Boilers

Three-pass C series boilers available from 1460 to 9580 sq ft steam, SBI ratings. Hot gases pass through firebox and two complete banks of fire tubes; afford maximum heat transmission into boiler water. Continuous hot water service with instantaneous or tank type coils available in wide capacity ranges. ASME approved.—Spencer Heater, Lycoming Div., Avco Corp.

300 Boilers

Type A series boilers available from 5640 to 39,-370 sq ft steam, SBI ratings; assure complete burning of coal, oil or gas plus maximum heat absorption, resulting in higher efficiency. Staggered location of boiler tubes and advanced designed crown sheet speed circulation. ASME

approved.—Spencer Heater, Lycoming Div., Avco Corp.

301 Cast Iron Sectional Boiler

Low stack or no stack are the two options available with new 450 "Mills" cast iron, sectional boiler. Has gross output of 1584 to 4120 mbh, and with natural draft when fired with heavy oil chimney heights run from 25 to 37 ft. Where no stack is desired, a built-in induced draft fan and smokehood supplies necessary draft.—The H. B. Smith Co., Inc.

302 Centrifugal Blowdown Separator

Centrifugal blowdown separator described in bulletin 30 is an answer to safe, economical boiler blowdown. It is used in place of a conventional blowdown tank or basin.—Wilson Engineering Corp.

303 Commercial Gas Fired Boilers

Bulletin on newest addition to "Basmor-Little" line of commercial gas fired boilers describes 600 series for hot water, steam or vapor heating systems and large volume water heating by indirect method. Available in 36 sizes, 725,000 to 5,800,000 Btu input.—Bastian-Morley Co., Inc.

304 Compact Steel Boilers

Catalog SB107 gives new SBI ratings and engineering details on "Compact-Type" steel boiler. Designed to compress maximum heating capacity into minimum floor space. Available for oil, gas, and coal firing. Capacities from 2930 to 39,370 sq ft SBI net steam EDR new ratings.—Burnham Corp., Steel Boiler Dept.

305 Converters

Catalog 57-77 on type WC converters consists of 12 pages of tables and four pages of engineering information. Supplements bulletin 54-78B on instantaneous heaters with 32 pages of tables and engineering information.—Adsco Div., Yuba Consolidated Industries.

306 Converters

Catalog 200-A lists standard shell and tube type converters. Dimension charts and capacity data for steam pressures 0 through 15 psig furnished. Describes piping for typical installations.—Ellicott Fabricators, Inc.

307 Converters

Bulletin 62 consists of 16 pages including converter rating tables arranged for easy use. At least three type R U-tube converter sizes listed for each set of operating conditions depending on pressure drop limitations. Indexed for quick reference.—The Whitlock Mfg. Co.

308 Converters for Heat Transfer

Catalog 63A lists converters for applications where efficient heat transfer from steam to hot water or from boiler water to hot water is required.—General Fittings Co.

309 Deaerating Systems

Eight page bulletin 120A discusses need for deaerating feedwater in steam plants and explains spray and boil-off types of deaerating feedwater heating systems available in economical standard units. Tables given for determining system size. Flow diagrams of typical installations.—The Whitlock Mfg. Co.

310 Gas Fired Boiler

Eight page brochure provides technical data on G-60 gas fired boiler. Covers ratings and dimensions, recommended piping, control and connection sizes, sample specifications. Has net IBR ratings from 435,100 to 3,602,500 Btu per hr.—American Standard Plumbing and Heating Div.

311 Gas Fired Boilers

New bulletin gives information on "Basmor" 400 series gas fired boilers for hot water or steam systems, or large volume water heating by indirect method. Ten sizes from 375,000 to 1,050,000 Btu input.—Bastian-Morley Co., Inc.

312 Gas Fired Boilers

New type 22 hydronic gas fired boilers in sizes from a three section 150,000 to a 10 section 675,000 Btu input, available for either steam or hot water heating, gravity or forced circulation installations.—Mueller Climatrol, Div. of Worthington Corp.

313 Gas Hot Water Heaters, Boilers

Brochure 22 contains data and specifications on four new models of automatic self-generating gas hot water heaters and boilers. AGA and ASME approved. Vertical types cut need for space consuming storage tanks. Recovery capacities range from 268 to 793 gph at 100 deg temperature rise. Btu inputs from 320,000 to 945,000.—Ewing Mfg. Co.

314 Gas Hot Water Heating Systems

New loose-leaf plastic binder gives information on boiler line. Includes "Multi-Temp" heating plants, packaged boilers, volume hot water heating installation, accessories, parts, general data, prices. Provides capacity ranges, dimensions, weights, applications, charts, diagrams, ratings, wiring and piping instructions, selection tables, service hints, specifications.—Hydrotherm, Inc.

315 Heat Exchange Equipment

Bulletin 6 lists and describes heat exchange equipment such as storage water heaters, instantaneous water heaters and converters, condensate coolers, dishwasher booster heaters, fuel oil and suction oil heaters, and a specially prepared cement lining used to factory line water heaters and tanks.—The Patterson-Kelley Co.

316 Heating, Cooling, Air Conditioning

Catalog 261 contains condensed data on line of heating, cooling and air conditioning products

for residential, commercial and industrial applications. Detailed coverage of each product can be found in the catalogs listed.—Young Radiator Co.

317 Heating Specialties

Catalog 76-H shows line of valves, traps and vents, and includes capacity charts and roughing-in dimensions.—Marsh Instrument Co., Div. of Colorado Oil and Gas Corp.

318 Heating and Temperature Control System

Advantages of "SelecTemp" heating and temperature control system, application of steam heat with circulated warm air and individual room temperature control, described and explained in eight page catalog 5627-A.—Iron Fireman Mfg. Co.

319 Heavy Duty Hot Water Heating Plant

Bulletin HY-F237 on modern heat for modern buildings features "Multi-Temp" gas fired, cast iron, hydronic heating plants with new electronic step control which step-fires separate combustion chambers in response to outdoor temperature. Btu per hr inputs from 360,000 to 3,600,000.—Hydrotherm, Inc.

320 High Temperature Water Boiler

Catalog HCC-2 describes advantages of C-E controlled circulation high temperature water boiler for large scale heating and certain industrial processing needs. Assures economical, efficient, compact installation with minimum space requirements. Heat output from 10 to 300 million Btu with design pressures from 150 to 500 psig.—Combustion Engineering, Inc.

321 High Temperature Water Generators

Advantages of "International-LaMont" high temperature water generators are described in 16 page bulletin 1600. Engineering data section gives factual comparison between HTW and high pressure steam systems along with pertinent cost considerations. Typical pressurization and pumping arrangements are discussed.—The International Boiler Works Co.

322 Hot Water Boilers

Hot water boilers standardly furnished ASME 125 psi, 250 deg, and designed for all types of closed circuit hot water systems are also available for high temperature water application. Gas, oil or gas/oil fired, 126,000 to 5,000,000 Btu, steel water tube design.—Sid E. Parker Boiler Mfg. Co., Inc.

323 Hot Water Boilers, Volume Water Heaters

Form 105A features new series II heaters in sizes 400,000 to 2,400,000 Btu per hr input, including four pass heat exchanger for maximum heat transfer, exclusive gas modulation and 100 percent copper and bronze water ways. Bulletin includes general specifications chart.—Raypak Co., Inc.

324 Hot Water Heating Boilers

Bulletin HY-F100 describes hot water heating boilers of all cast iron construction, 11 sizes with capacities from 50,000 to 300,000 Btu per hr. Especially engineered for gas. Require minimum installation space, are efficient in operation.—Hydrotherm, Inc.

325 Hot Water System for Apartments, Motels

Form 118 describes "All-in-one" combination package for apartment houses and motels covering requirements for domestic hot water, hydronics space heating and swimming pool heating. Includes general specifications charts, sizing charts and capacity chart for series I and II units.—Raypak Co., Inc.

326 Hydronic Products

Line of hydronic products for residential and commercial installations described in catalog J-99. Circulators, pumps, valves, vents, other products and accessories covered.—Taco Heaters, Inc.

327 Indirect Hot Water Boilers

All steel water tube boiler with built-in copper heat exchanger with capacities of from 2640 to 1,152,000 Btu per hr is specifically designed to furnish volume domestic hot water, 254 to 1106 gal per hr, 110 deg rise, and for heating swimming pools.—Sid E. Parker Boiler Mfg. Co., Inc.

328 Instantaneous Water Heaters

Catalog 61 describes instantaneous water heaters using steam or boiler water heat source to provide hot water supply on demand. Made in shell and tube designs, available in variety of sizes and capacities.—General Fittings Co.

329 Low Water Line Boilers

"LW" low water line boilers available from 2490 to 39,370 sq ft steam, SBI ratings, ASME approved. Unique divided design permits entry through narrow openings; overall height about 25 percent less than conventional boilers. Two watertight sections can be moved in separately, require no welding for installation and assembly.—Spencer Heater, Lycoming Div., Avco Corp.

330 Oil and Gas Fired Boilers

Bulletin 1260 describes "Powermaster" model 3 line of gas, oil and combination gas/oil fired boilers. Includes specially designed hot water boiler and new steam atomizing principle for use with No. 6 oil. Gives ratings and dimensions of all sizes in line, shows operation.—Orr & Sembower, Inc.

331 Package Generator

Form 3687 tells how three-pass firing in a two-pass boiler is done by new "Petro Pac" steam or hot water firebox package generator. Explanatory data, highlighted features, specifications included.—Petro Div., Iron Fireman Mfg. Co.

332 Package Generators

Specification sheets cover "Petro Pac" 300 series package generator (three-pass, wet back, Scotch generator fired by gas, oil or gas-oil in combination). Entire series 30 through 100 hp included in form 3582 and 3645 through 3651.—Petro Div., Iron Fireman Mfg. Co.

333 Package Hot Water Systems

Form 105B describes "Uni-Temp," "Dual-Temp," and "Tri-Temp" package systems and hookups for schools, apartments, restaurants, self-service laundries, industry. Single, two or three temperature systems in any combination desired. Covers requirements for hydronics central heating, domestic hot water and swimming pool heating from single generator.—Raypak Co., Inc.

334 Packaged Automatic Boilers

Bulletin BE400 provides output, fuel, dimension data on "Continental" packaged automatic steam and hot water boilers. Exclusive spinning-gas combustion that increases heat transfer shown. Guaranteed stack temperature and efficiency, reserve capacity for future needs, burner efficiency data, automatic safety controls, accessibility features, discussed. Shows how two-pass construction assures efficiency, compactness.—Boiler Engineering & Supply Co., Inc.

335 Packaged Boiler

Bulletin 4 provides details on packaged "Highlander" Scotch type boiler available in low or high pressure, oil fired, gas fired, or combination oil-gas, sizes from 24 to 463 hp, two pass design. Complete unit bears Underwriters approval, SBI ratings, 5 sq ft heating surface per bhp.—Industrial Combustion Inc.

336 Packaged Boiler

Bulletin 1275 covers new "Positive Flow" boiler tested and proven by well-known, consulting engineer firm. Design permits both feed injection and natural thermal circulation, augmenting each other to provide maximum circulating rate and most efficient form of heat transfer.—Orr & Sembower, Inc.

337 Packaged Boiler

"Husky" series completely automatic, forced draft packaged boilers with capacity range of 20 to 150 hp. Available for light oil, natural gas, combination gas-light oil operation. Has operating and programming type flame safeguard controls, circuit breakers, standard in enclosed cabinet.—Ray Burner Co.

Advertisers in Heating, Piping & Air Conditioning have furnished these descriptions of their catalogs, bulletins, and other helpful data. Copies are available on request.

338 Packaged Boiler

Series E automatic three pass packaged boilers with capacities from 30 to 300 hp featured in catalog. Available for operation on gas, oil or combination gas/oil with exclusive "Viscomatic" controlled air atomized firing. Ratings, dimensions and other data provided.—Ray Burner Co.

339 Packaged Boiler

"Webco-Ray" automatic, three pass packaged boilers for heating, power and process steam featured in literature along with ratings, data, dimensions, installation information. Units available for gas, oil or combination gas/oil firing. Capacities range from 20 to 600 boiler hp.—Western Boiler Co.

340 Packaged Boilers

Bulletin 601 discusses Scotch marine three-pass fire tube packaged boilers employing full 5 sq ft per bhp. Low or high pressure steam or hot water. Gas, oil or combination. Feature front-end cleaning without disturbing burner, piping. Design of burner eliminates stacks. Construction according to ASME, SBI codes.—Arkos Mfg. Co.

341 Packaged Boilers

Twelve page catalog describes type AS packaged water tube boilers for capacities from 4000 to 21,000 lb per hr of steam. Complete packages with rotary burners, integrated controls, soot blowers, refractory, and insulation, these units also have quiet rear-mounted draft fan which provides air cooling of furnace floor.—Superior Combustion Industries Inc.

342 Packaged Coal Fired Boilers

The full line of "Coal-Pak Automatic" packaged unit boilers for burning low cost bituminous coal are described in 10 page bulletin 1100. Combustion controls as well as automatic coal feed and ash removal systems for rapidly following changing load demands described. Units available for low or high pressure service in sizes from 71.6 to 300 hp.—The International Boiler Works Co.

343 Packaged Hot Water Boiler

Type CC packaged boilers designed for hot water operations and for capacities from 670,000 to 11,720,000 Btu per hr are described in this catalog. Burning gas, oil, or both, the type CC is equipped with a newly developed venturi action mixing tube to overcome the problems developing from improper boiler circulation.—Superior Combustion Industries Inc.

344 Packaged Steam Boiler

Type CC packaged steam boilers for capacities from 20 to 350 bhp are described in this catalog. A completely packaged unit which will burn gas, oil, or both, the type CC combines simple installation with high efficiencies and operating economy.—Superior Combustion Industries Inc.

345 Packaged Water Tube Boilers

Two lines of low pressure and high pressure, forced draft water tube package boilers are described in new bulletin 2000. The "Compak" series of fire-tested units for oil and/or gas is offered in 22 sizes ranging from 12 through 750 hp. Engineering specifications are included.—The International Boiler Works Co.

346 Primary and Secondary Pumping Manual

Engineering design manual, 20 pages, explains how primary and secondary pumping materially cuts heating cost where multiple buildings or multiple zones within a building are to be heated with circulated water. Reduces pump hp, saves fuel by improving control.—Bell & Gossett Co.

347 Safety Controls for H.W. Heating Boilers

Engineering information in easy-to-follow form, that tells why safety devices are needed on hot water space heating boilers, which ones to use, and how to select them is given in bulletin P-30C. Includes drawings and diagrams.—McDonnell & Miller, Inc.

348 Scotch Package Generator

"Petro Pac" 301H and 301L series Scotch package generator (three-pass, wet back generator with output of 100 through 600 hp) described in specification sheet 3719. The 301 is a high or low pressure steam or hot water generator that can be fueled by gas, oil, or gas-oil combination.—Petro Div., Iron Fireman Mfg. Co.

349 Scotch Type Packaged Boilers

Modern Scotch type three-pass design gives these boilers certified efficiencies of over 80 percent. Flue gas temperature in the 400 to 450 F range, 20 to 800 hp, and new SBI 5 sq ft per hp fireside heating surface ratings. Designed for oil, gas or oil/gas firing. Shipped in single units or boiler-burner packages.—Burnham Corp., Steel Boiler Dept.

350 Steam Boilers

Steam boilers available in gas, oil or combination gas/oil fired for high or low pressure application are furnished fully packaged with all controls wired ready for connection to utilities. Steel water tube design, 1½ to 150 hp.—Sid E. Parker Boiler Mfg. Co., Inc.

351 Steam or Hot Water Generator

Folder 6530 highlights benefits of "WhirlPower" three-pass steel firebox steam or hot water package generator: clean, forced draft firing, sealed combustion chamber, elimination of sidewall refractory.—Iron Fireman Mfg. Co.

352 Steam-to-Water Converters

Series K of U-tube "Paracoil" converters described in 12 page bulletin 50-1. Gives converter capacity tables from 0 to 15 psig steam. Includes hints on selection of steam-to-water converters and tables of dimensions and weights.—Davis Engineering Div., Tube Reducing Corp.

353 Steam and Water Service Manual

Engineer's manual on steam and water service offers diagrams and engineering information on installing new systems, improving existing ones. Contents include domestic hot water, hot water storage heaters, instantaneous heat exchangers, heating exchangers for cooling, fuel oil preheaters, process hot water, pressure reducing, jacket water cooling, two-temperature hot water.—The Powers Regulator Co.

354 Storage Heaters

Sixteen page bulletin 40C facilitates selection of type K storage heaters for conditions normally found in buildings of various classifications. Typical layouts included with tables of pressure thickness, vertical and horizontal storage heater dimensions, capacities.—The Whitlock Mfg. Co.

355 Storage Water Heaters

New bulletin 1234 gives capacities, dimensions, material thicknesses for vertical and horizontal heaters of plain steel, copper silicon, copper lined and "Pre-Krete" lined. Has information on new "Scalefree" 230 indirect gas fired storage water heater, capacities from 250 to 4000 gal, recovery from 390,000 to 2,215,000 Btu per hr.—The Patterson-Kelley Co., Inc.

356 Water Feeders, Pump Controllers, Switches

Chart F-1060 pinpoints uses of boiler water feeders, pump controllers, tank feeders, relief valves, flow switches and liquid level switches in typical commercial building. Shows applications on boilers, tanks, heaters, chillers, fan coils, cooling towers, other equipment.—McDonnell & Miller, Inc.

357 Water Tube Boilers

Twelve page bulletin 586-A describes "Modulatic" water tube package boilers, featuring fully automatic, compact design permitting installation virtually anywhere. Specifications, information on nine models from 10 to 150 hp. Explains operating principles. Shows typical installations using both single and multiple-boiler arrangements.—Vapor Heating Corp.

358 Water Tube Package Boiler Installations

Sixteen page bulletin 491-A describes industrial and marine installations of "Modulatic" water tube boilers in use. Shows how boilers can be fitted into corners, aisles, balconies, other cramped spaces.—Vapor Heating Corp.

359 Zone Valve

Four page brochure titled "Matched to Modern Comfort" describes operation and application of new zone valve. Lists specifications and dimensions.—Taco Heaters, Inc.

An engineer or contractor obviously can't find *all* the information he needs in catalogs, bulletins and manuals — but he *can* find a great deal of the information that he must have.

Humidification, Dehumidification & Evaporative Coolers

360 Air Washers

"Capillary" air washers for controlled air conditioning described in catalog section 10. Evaporative cooling minimizes refrigeration needs. Humidifies, dehumidifies, cleans, scrubs gases and fumes. Refrigeration may be incorporated or added later. Cell features high saturation efficiency, low resistance.—Air & Refrigeration Corp.

361 Commercial Humidifiers

New booklet describes line of "Aprilaire" commercial humidifiers. Discusses method of humidification, sizing and capacities for various units.—Research Products Corp.

362 Duct Type Humidification Equipment

Designed for installation in existing or planned duct circulating systems, standard duct type humidifiers described in catalog atomize from 3 to 24 lb per hr of water vapor. The catalog offers engineering information, plus application and usage data.—Walton Laboratories, Inc.

363 Hospital Air Hygiene

Twenty page report on air hygiene for hospitals discusses problem of hospital infection and findings of the Research Foundation, University of Toledo, on removal of airborne bacteria. Charts and illustrations explain application of "Kathabar" air sterilizing systems for hospitals.—Surface Combustion Div. of Midland-Ross Corp.

Advertisers in Heating, Piping & Air Conditioning have furnished these descriptions of their catalogs, bulletins, and other helpful data. Copies are available on request.

364 Humidification

Bulletin is designed to assist architects, engineers and contractors in technical aspects of commercial and industrial humidification. Includes estimating the capacity, sizing and selecting equipment. Bulletin also covers the humidification requirements of more than 70 industrial applications.—Walton Laboratories, Inc.

365 Moisture Eliminator Blades

Four page brochure describes "Soplasco" moisture eliminator blades to solve the problem of corrosion.—Southern Plastics Co.

366 Moisture Eliminator Blades

Single page leaflet describes SP-009 (copolymer of polystyrene) and SP-010 (rigid polyvinyl) moisture eliminator blades for industrial air conditioning.—Southern Plastics Co.

367 Space Type Humidification Equipment

Catalog covers standard space type atomizing humidifiers, together with application and engineering information for ductless installations. Self-contained humidity stations in several sizes generate from 1 to 24 lb per hr of water vapor. —Walton Laboratories, Inc.

368 Steam Humidifiers

Bulletin 500-D discusses effects of relative humidity on profits and on hygroscopic materials. Various applications described and results evaluated. Describes electrically operated humidifiers. Lists different types, and prices and specifications. Includes selection data.—Armstrong Machine Works.

Infra-Red Heat

369 Gas Fired Infra-Red Heaters

Form PH-658 describes and explains installation of gas fired, infra-red heaters. Building descriptions, heat loss requirements and reasons for selection of infra-red heat given. Benefits of infra-red heating listed.—Panelbloc Div., The Bettcher Mfg. Corp.

370 Industrial Infra-Red Heating

Booklet P-1-60 shows successful infra-red gas fired installations from single units in service stations to multiple-unit installations in foundries and warehouses. Industries covered range from manufacturing, automotive sales, retail stores to poultry raising.—Panelbloc Div., The Bettcher Mfg. Corp.

371 Infra-Red Floor Gas Heaters

Folder features infra-red floor model gas heaters. Produces auxiliary heat for indoor or outdoor unheated work areas in industrial or commercial installations. Easily relocated by placing rod through carrying hooks on top of unit. Beams infra-red heat over all directions.—Space-Ray Corp.

372 Infra-Red Gas Heater

Folder describes infra-red overhead gas heaters. Beams infra-red rays down in wide circular pattern to heat industrial and commercial buildings. Has thermostat for automatic operation. Not dependent on outside power.—Space-Ray Corp.

373 Infra-Red Gas Heating Equipment

Brochure offers data on new "Co-Ray-Vac" infra-red sealed combustion gas heating equipment, offering 90 percent efficiency, for greenhouses, warehouses, factories, garages, hangars and other commercial-industrial applications.—Roberts-Gordon Appliance Corp.

374 Infra-Red Heat

Booklet of facts on high intensity infra-red heat explains advantages of gas fired, high intensity, infra-red heating over other types of heating for industrial and commercial buildings.—Space-Ray Corp.

375 Installing Infra-Red Heat

Four page booklet PC-1-59-30-2 describes gas fired infra-red heaters. Includes installation photos showing wide range of heating problems solved by infra-red. Unit specifications and comparison of infra-red to conventional heating are presented.—Panelbloc Div., The Bettcher Mfg. Corp.

376 Woven Wire Cloth, Screen

Bulletin 160 describes industrial wire cloth and screen. Illustrates weaving and fabricating, outlines ordering data. Includes specification tables and illustrations of square mesh wire cloth and square opening space cloth. Reference data section given. Uses include infra-red heaters.—The Cleveland Wire Cloth & Mfg. Co.

Insulation (& Sun Heat Control)

377 Anchors for Insulation

Bulletin 3, "Mira" data sheets 3 and 12 describe surface anchors and how they are used for applying insulation without need for mechanical attachments.—Miracle Adhesives Corp.

378 Building Insulation

Twenty page booklet FB-105 on "Foamglas" building insulation shows its effectiveness through photographs, case studies, line drawings. Also data on accessories; chart computing U value required to prevent warm condensation; technical data on construction of roofs, curtain and core walls, wall linings.—Pittsburgh Corning Corp.

379 Duct Insulation

Literature describes new "E-Z-Ply" duct insulation manufactured by new process to greatly improve rigidity and strength, thereby simplifying installation. Available plain, coated and with foil facings and vapor barriers.—Baldwin-Ehret-Hill, Inc.

380 Duct Insulation

Brochure describes fiber glass insulation of extremely fine "flame-blown" glass fibers. Fibers produce strong and resilient blanket offering maximum insulation. Many facings and coatings for duct wrap and liner applications also described.—Silvercote Products, Inc.

381 Duct Insulations

Literature covers line of "Fiberglas" rigid and flexible duct insulations and liners for heating and air conditioning systems. Includes recommended use, technical data and specifications.—Owens-Corning Fiberglas Corp.

382 Duct and Pipe Insulation

Four page catalog gives engineering and other pertinent design data for line of fiber glass thermal duct insulation for maintaining temperatures in cold and warm air ducts, fiber glass acoustical duct insulation, and pipe insulation.—The Ruberoid Co.

383 Fastening Insulation with Stud Welding

Four page "Gramweld Insul-Pin" catalog G9-19R on electric stud welding. Explains new system of installing insulation rapidly and permanently with portable stud welding equipment. No special wiring, flux, ferrules or compressed air required. Will not distort or burn through material being welded.—Omark Industries, Inc.

384 Fiber Glass Duct Insulation

"Silvercel" combines long, strong "textile" glass fibers and extremely fine "blown" glass fibers for strength and resiliency. Combination helps blanket hold staples, recover to full insulation thickness, give superior thermal insulation and withstand air erosion when used as duct liner.—Silvercote Products, Inc.

385 Fiber Glass Duct Insulation

Six page form IN-285A describes properties, characteristics and product forms and explains and illustrates application methods for "Microlite" fiber glass duct insulation. Tables show thermal performance, recommended thicknesses, types of available vapor barriers, fire hazard rating and compliance with federal specifications.—Johns-Manville.

386 Fiber Glass Duct Liner

"Micro-Bar" dual-density fiber glass duct liner described in eight page brochure IN-302A. Covers general description; shows application techniques; gives specifications and advantages in checking air erosion, cutting noise, improving insulating efficiency and its low fire hazard.—Johns-Manville, Industrial Insulations Div.

387 Fiber Glass Pipe Insulation

Eight page brochure IN-237A on "Micro-Lok" fiber glass pipe insulation explains its construction and application. Includes guide to specifications for application and finishing for various types of services. Shows physical properties, thermal conductivity, available jacket materials, recommended thicknesses, sizes.—Johns-Manville, Industrial Insulations Div.

388 Flame Resistant Vapor Barriers

Brochure describes "Pyro-Kure" vapor barrier materials with flame extinguishing properties, non-toxic and non-corrosive to metals. Releases gas to smother flames when surrounding temperature reaches combustion stage. Flame resistant vapor barriers used as facings for duct and insulation facing and pipe jacketing. UL ratings and physical property summaries included. —American Sisalkraft Co.

389 Foamed Plastic Pipe Insulation

Four page bulletin IN-213A describes "Aerotube" foamed plastic pipe insulation and gives data on installation for various types of pipe and tubing, as well as tables of recommended thicknesses and thermal and physical properties. —Johns-Manville.

390 Foamed Polyurethane Insulation

Four page booklet FT-1 introduces "Foamthane" foamed polyurethane insulation. Lists physical properties and applications as in low temperature spaces, curtain walls, duct work, original equipment and residential, commercial and educational buildings. Product features shown.—Pittsburgh Corning Corp.

391 Glass Fiber Insulation

Eight page catalog ULD discusses use of "Ultralite" long textile-type glass fiber insulation for duct wrap and liner. Characteristics and application methods, plus available and suggested thicknesses listed. Facings (including new gray fire resistant coating), shipping information, specifications given.—Gustin-Bacon Mfg. Co.

392 Heat and Cold Insulations File

New catalog digest, "Insulation Fact File," briefly describes line of heat and cold insulations for service from subzero to 2000 F. Chart shows temperature limits of block, blankets, felts, fill, cements and pipe insulations.—Baldwin-Ehret-Hill, Inc.

Over 850 descriptions of catalogs, bulletins and other data available to you without obligation on request are described in these pages.

393 High Temperature Insulating Cements

Four page catalog introduces line of insulating-finishing cements for temperatures up to 1800 F. Includes product information on mineral wool cements, "Calsilite" dual-purpose cement, single coat cement, and asbestos cements.—The Ruberoid Co.

394 High Temperature Insulation

Four page catalog describes "Calsilite" insulation for soaking heat to 1200 F, and "Calsilite-Hi" for soaking heat to 1800 F. Physical characteristics, recommended thicknesses, and other pertinent design data in chart form included.—The Ruberoid Co.

395 Insulation Tubing for Copper Lines

Properties, test data and specifications applicable to "Cell-Tite" insulation tubing for copper lines are given in eight page bulletin.—B. F. Goodrich Sponge Products.

396 Insulations

Uses for "Silvercel" and "Fine-Fiber" insulations described in two page brochure. Acoustical data and Underwriters' ratings given for "Fine-Fiber" and thermal conductivity data for both "Silvercel" and "Fine-Fiber." Indicates how one or both products has variety of applications.—Silvercote Products, Inc.

397 Molded Pipe Insulation

Eight page booklet on "Snap*On" pipe insulation contains characteristics and application data for one piece molded pipe insulation of fine glass fibers. Application specifications cover heating, plumbing, insulation of valves and fittings, cold piping, dual temperature and outdoor piping. Thickness charts and information about sizes, packaging and available jackets included. —Gustin-Bacon Mfg. Co.

398 Pipe and Block Insulation

Folder titled, "Cut Costs 5 Ways . . ." tells story of "Thermasil" calcium silicate pipe and block insulation. Explains how users can save labor, shipping costs, material, inventory and warehousing, and installation costs. Size and packaging information given.—Baldwin-Ehret-Hill, Inc.

399 Pipe Insulation

"Fiberglas" and "Kaylo" pipe insulation literature describes line of pipe covering for service from −120 to +1800 F. Includes recommended service and specifications.—Owens-Corning Fiberglas Corp.

400 Piping Insulation

Product features and application data given in 4 page booklet FI-108 on "Foamglas Sta-Dry" insulation for hot and cold piping. Tables compute suggested thicknesses for temperatures from 35 to 350 F; sizes and thicknesses for iron pipe and copper tubing; application specifications; physical properties.—Pittsburgh Corning Corp.

401 Piping Insulation

Brochure sets forth specifications and application methods of preformed "Vascocel" piping insulation. This easy to use tubing ends condensation, conserves heat and aids as vapor barrier. —Virginia Smelting Co.

402 Polystyrene Insulation

New eight page circular discusses expanded polystyrene insulating material. Describes product, physical properties, dimensions, recommends thickness for wide range of temperatures. Uses are shown. Treats simplified installation and finishing techniques. Gives specifications for installation under slabs, in crawl space, cold rooms, masonry walls, as free standing slabs, for pipe covering.—Uni-Crest Div., United Cork Companies.

403 Polystyrene Insulation

Eight page booklet describes expandable and expanded polystyrene. Applicability of regular and self-extinguishing types to construction, refrigeration, air conditioning, flotation and packaging fields shown. Pre-expansion and molding discussed. Self-extinguishing type has opened areas of use previously closed to regular polystyrene.—Uni-Crest Div., United Cork Companies.

404 Preformed Pipe Insulation

Bulletin 37-D describes preformed pipe insulation that stops condensation and sweating. Data shows specifications, low K factor, light weight, long life, closed-cell construction and installation methods on new or installed dual temperature pipes and tubes.—Presstite Div., American-Marietta Co.

405 Radiant Ceiling

Monthly external publication for architects and engineers with data on radiant ceiling explains how advanced system of heating, cooling and acoustical control offers many design possibilities and benefits.—Burgess-Manning Co.

406 Rigid Pipe Insulation

Folder describes advantages and directions for applying "Rigid Armaflex" foamed plastic type pipe insulation for use at pipe hanger locations on deeply buried underground lines and other locations where pipe coverings may be subject to compression deformation.—Armstrong Cork Co.

407 Roof Cooling Systems

Scientifically designed roof cooling system uses evaporation to reduce roof temperatures as much as 50 F, inside temperatures 10 to 15 deg. Used with air conditioning, "April Showers" cuts equipment requirements and operating costs. Automatic controls. Benefits listed in four page catalog.—Swartwout Fabricators, Inc.

See the front cover of this Trade Literature Supplement to Heating, Piping & Air Conditioning for the index by products to these listings.

408 Roof Cooling Technical Data

Technical bulletin contains facts, figures and data on roof cooling systems; engineering analyses, design considerations for reducing air conditioning loads for specific installations. Includes data on economical heat relief through roof spraying systems on flat roof buildings.—Muellermist Irrigation Co., Fanjet Div.

409 Roof Spraying Systems

Four page bulletin describes non-clogging roof cooling systems and explains conditions when roof spraying is needed, comfort benefits, reduction in air conditioning loads and how spraying is best accomplished.—Muellermist Irrigation Co., Fanjet Div.

410 Sheet Insulation

Literature describes physical characteristics, advantages and directions for applying "Armaflex" insulation, flexible foamed plastic material in sheet form. Has foamed closed cellular structure with excellent insulating efficiency and high vapor resistance.—Armstrong Cork Co.

411 Thermal Insulations

Newly revised 64 page catalog IN-244A describes thermal insulations for all types of commercial and industrial uses in applications from —400 to 3000 F. Includes descriptions, applications, advantages, available forms, specification data, temperature limits. Specialized insulations reference tabbed in six sections.—Johns-Manville, Industrial Insulations Div.

412 Underground Insulation

Forty-four page booklet describes "Insul-Fil" pour type insulation and its application. Features engineering drawings, heat loss determination graphs and other information to guide mechanical engineer and installing contractor to economical and trouble-free insulation.—Miracle Adhesives Corp.

413 Underground Pipe Insulation

Brochure on "Witcolite" granulated, resilient adhesive material which forms three zones of insulation for underground hot or cold pipes and provides corrosion and water resistance. Cured anti-corrosive zone, air pocketed sintered zone, and granular zone provide maximum thermal insulation. Describes advantages, gives installation instructions, typical properties, technical information.—Witco Chemical Co., Inc.

414 Weatherproof Penthouses

Bulletin 50-100 covers "A&R" weatherproof penthouses incorporating interior and exterior surfaces, as selected with desired insulation, into easily handled panel sections. Access doors, windows, vents may be included. Custom internal arrangements. Overall size and weight minimized by using these individually removable panels.—Air & Refrigeration Corp.

Motors, Bearings & Drives

415 Air Moving Equipment Motors

Air-over motors described in bulletin MU-250. May save up to 30 percent costs of air moving equipment. Motors mount directly in air stream of driven propeller or axial flow fans in cooling towers, exhaust systems, air cooled heat exchangers, condensers. Construction details, performance, ratings.—Wagner Electric Corp.

416 Bearings

Sixty-four page catalog 454 on bearings features technical and engineering data on pillow blocks, flange cartride units, rubber mounted units, etc. Exclusive features of permanent seal, prelubrication, self-alignment and zone hardening described.—Sealmaster Bearings, A Div. of Stephens-Adamson Mfg. Co.

417 Dry Fluid Drives and Couplings

New expanded line of "Flexidyne" drives and couplings described in 24 page bulletin 70 with engineering drawings, installation pictures, selection tables. Includes 10 stock couplings and eight stock drives ranging from fractional to 1000 hp.—Dodge Mfg. Corp.

418 Electric Motor Selection Guide

Guide 51C6052Y for quick selection of electric motors includes squirrel cage motor selection chart, ratings, construction features, dimensions, descriptions of special types, and electrical modifications.—Allis-Chalmers Mfg. Co.

419 Electric Motor Starters

Publication 6100 introduces "New Frontier" in control design and performance. Features new across-the-line motor starters, which are described, including dimensions and operating details.—Allen-Bradley Co.

420 Engines

Four page "full line" folder CR-764-K gives condensed data on gas engines available in 15 sizes ranging from 38.5 to 192 maximum hp in 4's, 6's and V-8's. All models are available from stripped engines to complete power units.—Internationtal Harvester Co.

421 Engines

Power rating chart CR-761-K gives data and list of typical applications for diesel, gasoline, LPG and natural gas engines in 15 sizes ranging from 38.5 to 192 maximum hp and as stripped engines or complete power units. Applications include use with compressors, blowers, pumps, welders, pipe cleaning and painting, refrigeration.—International Harvester Co.

422 Engines

Series of six page specification sheets CR-658-L, CR-659-L, CR-660-L, CR-663-L, CR-664-L and CR-665-L cover line of gasoline, LPG and natural gas engines available in 15 sizes ranging from 38.5 to 192 maximum hp in 4's, 6's and V-8's. Models available from stripped engines to complete power units.—International Harvester Co.

423 Flexible Couplings

Bulletin 5103 covers line of "Sure-Flex" flexible couplings, including "Junior" couplings, large-size bushed, piloted floating shaft, and spacer couplings. Contains ratings, engineering and selection data, load symbols, service factors.—T. B. Wood's Sons Co.

424 Fractional Horsepower Motors

New "Duty Master" fractional hp a-c motors, 1/20 to ¾ hp, are described in bulletin B-2514. Included are construction details and dimensions for the line.—Reliance Electric & Engineering Co.

425 Fractional Horsepower Motors

Bulletin EM 201 describes fractional horsepower motors, general purpose and blower types from 1/3 to 3 hp. Includes features, ratings and mounting diagrams.—A. O. Smith Corp.

426 Induction Motors

Polyphase, squirrel-cage induction motors, drip-proof type, from 1 to 150 hp are discussed in 12 page bulletin 600. Industrial applications, electrical types, mechanical variations, construction features, insulation, dimensions and ratings covered.—Century Electric Co.

427 Integral Horsepower Motors

Line of "Duty Master" a-c motors, 1 through 2000 hp, described in 12 page brochure B2515. Information on enclosures and mountings as well as details on construction features included. —Reliance Electric & Engineering Co.

428 Integral Horsepower Motors

Bulletin EM 202 shows construction and design details of integral horsepower motors, both single phase and polyphase from frames 183 through 505, with ratings, availabilities and dimensions.—A. O. Smith Corp.

429 Low Vibration Motors

Bulletin describes and outlines features of "Silent Service" low vibration quiet motors

particularly applicable to ventilating and air conditioning systems where low noise levels and elimination of structure and duct-borne vibration are important. Increase in bearing life results from precision balance and low vibration. —General Dynamics Corp., Electro Dynamic Div.

430 Magnetic Motor Controls

Six page folder entitled "½ the Size of Conventional Controls" defines principle of type RA (right angle) design. Explains why magnetic motor controls of this design offer reduced size and weight without sacrificing performance or dependability. Applications prove these starters are solving the problem of packing more control into less space.—The Arrow-Hart & Hegeman Electric Co.

431 Motor Application Guide

Sixteen page bulletin 010 comprises 1961 motor application guide, covers line of 1/20 to 500 hp, polyphase, single phase and direct current motors. Two motor selection charts included to match motors to applications. Single and three-phase motor characteristics, gearmotors, d-c motors and selective speed drives discussed.—Century Electric Co.

432 Motor Controls

Twelve page digest 14C9462A catalogs motor controls for various applications. Covers manual starters, magnetic starters and contactors, pilot and control circuit devices, high capacity and other starters, d-c controls, and control enclosures.—Allis-Chalmers Mfg. Co.

433 Motors

Bulletin Q-50 discusses unique standard of quality control maintained in manufacturer's motors. Illustrated are wire testing, bearing testing and application, dynamic balancing, vibration and atmosphere testing and inspection to insure dependable performance.—General Dynamics Corp., Electro Dynamic Div.

434 Motors

Bulletin C-404 describes a-c motors from 1 to 800 hp; wound rotor motors 3 to 600 hp; totally enclosed and explosionproof motors 1 to 200 hp. Includes information on various electrical and mechanical modifications, gear motors, d-c motors, MG sets and variable speed drives.—General Dynamics Corp., Electro Dynamic Div.

435 Motors with Resilient Mountings

Bulletin MU-245 lists motors of 1/6 through 10 hp, available with resilient mountings. Covers resilient motor mounting construction and applications, along with larger ratings developed to meet needs of makers of central air conditioning units requiring ultra-quiet operation.—Wagner Electric Corp.

436 Motors and Starters

Bulletin MU-251 describes polyphase open-type, totally-enclosed, or explosionproof motors and magnetic increment starter combinations for high efficiency in applications requiring reduced current draw at starting. Performance data included.—Wagner Electric Corp.

437 Mounted Bearings

Bulletin 10, 82 pages, covers line of industrial bearings for all types of applications. Sections devoted to ball bearings, "Timken" roller bearings, spherical roller bearings and sleeve bearings, available as pillow blocks, flange bearings, hanger bearings, units, or take-ups.—Dodge Mfg. Corp.

438 Pump Motors

Four page bulletin 1455 on close-coupled pump single and three-phase motor line includes information on various motor types and describes close-coupled pump motor construction. Close-coupled and "Pacific Coast" pump motor dimensions included.—Century Electric Co.

439 Pump Motors

Four page bulletin B-2507 outlines variety of flanges, mounting brackets and enclosures available on pump motors. Information about the line is given.—Reliance Electric & Engineering Co.

440 Pump Motors

Bulletin EM 203 describes line of motors for pump industry. Construction details, ratings, mounting dimensions of jet pump, vertical hollow shaft, vertical solid shaft and close coupled types included.—A. O. Smith Corp.

441 Pushbutton Wiring Diagrams

Publication 6094 aids the understanding of useful pushbutton circuits to speed installation of control systems. Each circuit illustrated with an elementary line diagram and a detailed wiring diagram.—Allen-Bradley Co.

442 Selection, Application of Motor Insulations

Twelve page bulletin 1022 describes dielectric, chemical, mechanical and thermal material properties and factors determining "selective insulation systems" for specific electrical motor applications.—Fairbanks, Morse & Co., Electrical Div.

443 Selector Chart for Motor Controls

Quick selector chart simplifies and speeds selection and ordering of motor controls. Includes motor control ratings, sizes, features, catalog numbers, ordering instructions, listing of standard heater tables. Chart is hole-punched at top for handy reference on wall, and has index tabs to make it easy to locate desired information.—The Arrow-Hart & Hegeman Electric Co.

444 V-Belt Drive

Single, endless V-ribbed belt of "R/M Poly-V" drive runs smoothly over grooved sheaves to

deliver more power in same space with reliability. Eliminates excessive vibration, noise, belt and sheave wear, and length matching problems; drive life is longer and two cross sections fulfill every heavy duty requirement for industrial air conditioning blowers, pumps and compressors.—Raybestos-Manhattan, Inc., Manhattan Rubber Div.

445 V-Belt Drives

Bulletin A695A, 44 pages, describes new line of V-belt drives. Smaller, cost less, weigh less and require less space than conventional V-belt drives. Includes engineering drawings, prices, selection tables.—Dodge Mfg. Corp.

446 V-Belt Drives

Two part catalog 197/9102 gives information on conventional V-belt and compact "Ultra-V" drives. Both catalog sections include drive selection and hp tables, data on standard bushed, special and bored-to-size sheaves.—T. B. Wood's Sons Co.

Your comments on this Trade Literature Supplement to Heating, Piping & Air Conditioning are invited.

447 Variable Speed Drive

Ten page bulletin 6102 discusses SVS stationary control, multiple V-belt, variable speed drive providing accurate speed control, prevention of freezing and sticking from fretting corrosion. No lubrication required. Patented construction assures easy speed adjustment from either side. Facts on compact "Quick-Slide" motor base included.—T. B. Wood's Sons Co.

448 Vertical Weather Protected Motors

Bulletin 1450 describes in eight pages the mechanical features of newly redesigned variable thrust bearing assembly for meeting wide range of thrust requirements inherent in applications for hollow shaft construction motor.—Fairbanks, Morse & Co., Electrical Div.

449 Wound Rotor Starters

Brochure 6093 deals with starting and speed regulation of low voltage (600 volts max.) wound rotor motors. Describes motor characteristics and gives typical applications of automatic and manual controls.—Allen-Bradley Co.

Odor Control, Air Freshening

450 Air Purification Equipment

Bulletin 108A describes "Dorex" activated carbon air purification equipment, C cells and H canisters and gives data on equipment selection, installation and application. Included is information on replacement service and discussions of activated carbon as well as the conditions for proper purification.—Connor Engineering Corp.

Parts, Clamps, Anchors, Bolts, Screws, Etc.

451 Electronic Packaging of Fasteners

Brochure on "Fasten-Pak" electronic packaging for warm air heating, air conditioning, ventilating, roofing, other products requiring assembly materials or fasteners packaged. Counts, fills, seals and prints up to four lines of copy on kraft opaque or translucent bags. Prevents waste, errors, storage; saves money when purchasing fasteners.—Mid-Continent Screw Products Co.

Pipe, Tube, Hose & Conduit

452 Carbon Steel Tubing for Pressure Uses

Four page booklet TB 142B contains information on seamless and welded carbon steel tubing for pressure uses. Includes condensed data on mechanical and physical properties, hot and cold working operation, and fabricating procedures. —Babcock & Wilcox Co., Tubular Products Div.

453 Conduit and EMT

Sixteen page bulletin 485 describes advantages, applications, manufacturing and quality control methods of "Spang" conduit and "SpanGleam" EMT. Technical section includes product specifications plus useful charts.—National Supply Div., Armco Steel Corp.

454 Continuous Butt Weld Steel Pipe

Seventy page brochure ADV. 1015 on continuous butt weld steel pipe contains technical data on standard and line pipe, drive pipe, water well reamed and drifted pipe, water well casing, pipe for piling, structural grade pipe, "X-Tru-Coat" plastic coated pipe. Manufacturing process described. Bundling tables, weights, specifications, ordering procedure, sales information.—Republic Steel Corp.

455 Continuous Weld and Seamless Pipe

Bulletin SPA-081-960 covers durable "Yoloy" steel pipe. Resistant to soil, chemical and atmospheric corrosion. Comparison graphs, tabular data on tests, and specifications given.—Youngstown Sheet and Tube Co.

456 Copper and Copper Alloy Tubing

Catalog covers sizes, lengths, tolerances, composition and temper of copper and copper alloy tubing. Featured are modern methods of producing tube from casting through packaging.—Wolverine Tube, Div. of Calumet & Hecla, Inc.

457 Copper Tubes, Fittings

Folder briefly outlines advantages of copper tubes for soil, waste and vent services. Includes drawings of wide range of cast-brass solder-joint drainage fittings available.—Anaconda American Brass Co.

458 Corrosion Resistant Pipe

Piping of high silicon iron alloy, corrosion resistant to practically all commonly used process chemicals, covered in brochure PL/L. Used extensively in construction of acidproof waste lines. Bell and spigot sizes 1½ to 15 in. Fittings and caulking available.—The Duriron Co., Inc.

459 Corrugated Metal Hose

"Heliflex" catalog contains technical information on new line of corrugated flexible metal hose in stainless through 16 in., "Monel" through 8 in., bronze through 8 in., carbon steel through 8 in. Application data, fitting dimensions, pressure and flexing data. Includes chapter on obtaining best results from flexible pipe connector installations.—Allied Metal Hose Co.

460 Drawn, Extruded Aluminum Tube, Shapes

Catalog contains information on drawn and extruded aluminum tube and extruded shapes. Included are metal's special features, metallurgical aspects, mechanical, physical and chemical characteristics, tolerance standards, and extrusion definitions, along with statement covering available alloys, length, shipping limitations and size range.—Wolverine Tube, Div. of Calumet & Hecla, Inc.

461 Flexible Plastic Pipe

Twelve page booklet ADV. 994 on FE flexible plastic pipe describes advantages and suitability for sprinkler systems, with jet pumps, industrial piping, drain lines, swimming pools, air conditioning. Data on pressure ratings, properties, head loss, chemical resistance, other technical information. Fittings and joining procedure described. Water delivery tables provided.—Republic Steel Corp.

462 Flexible Polyethylene Pipe

Catalog covers characteristics of new-formula "Hi/Mol" high density, flexible polyethylene pipe, including physical properties, life-test performance, chemical resistance, installation features and fittings.—Carlon Products Corp.

463 Flexible Rubber Pipe

Catalog 890 describes "Soundzorber" wire-reinforced rubber pipe for reducing noise transmission, preventing vibration transmission, absorbing water hammer in water, chemical, sewage and other liquid and semi-liquid piping. For 150 and 250 lb service. New 250 F HT type for high temperature hot water and dual systems.—General Rubber Corp.

464 Flexible Rubber Pipe

"Condor" flexible rubber pipe outlasts steel and is made in types to withstand pressures up to 250 psi. Installation is easy, economical and with no danger of leaky joints at pipe bends. "Hydro-Lok" built-on flanges offer full sealing surface plus advantage of sure alignment and easy rotation of pipe to equalize wear without removing flange bolts.—Raybestos-Manhattan, Inc., Manhattan Rubber Div.

465 Flexible Tubing Handbook

Thirty-six page catalog and handbook of flexible metallic tubing and hose shows advantages, applications, specifications for all types, couplings to use and how to apply couplings, plus detailed specifications on all sizes from 5/32 to 20 in.—Pennsylvania Flexible Metallic Tubing Co.

466 Heat Exchanger and Condenser Tubes

Twelve page brochures cover "Electrunite" heat exchanger and condenser tubes; one on carbon steel tubes (HEC-1), one on stainless steel tubes (HES-1). Specifications, ASTM A-214 (carbon), ASTM A-269 and A-249 (stainless) detailed for consideration when purchasing or specifying heat exchanger and condenser tubes. Republic Steel Corp., Steel & Tubes Div.

467 Heat Exchanger Tubing

Eight page brochure TB-431 introduces unique "Lectrosonic" heat exchanger tubing. Gives details of its manufacturing and testing procedure, pointing out features which make it particularly well suited for heat exchanger use.—Babcock & Wilcox Co., Tubular Products Div.

468 Ice Rink Installation

Thirty-two page report on ice rinks, their construction and maintenance describes the ad-

vantages of wrought iron for this corrosive service. Points out various types of corrosion, compares several materials used for rink construction. Rink installations and a rink survey included.—A. M. Byers Co.

469 Light Weight Steel Tubing

Eight page folder VT-1 covers "Electrunite" light weight steel tubing with grooved ends for "Victaulic" couplings. Available for portable temporary, semi-permanent or permanent piping systems. Outlines suggested uses by various industries and gives advantages. Charts include test pressures, working pressures and comparison with pipe sizes. "Victaulic" fitting line shown.—Republic Steel Corp., Steel & Tubes Div.

470 Metal Hose Design Guide

Catalog gives information on interlocked and corrugated metal hose together with fitting data. Considerations for temperature, pressure, motion, media, etc. included to permit preliminary design for most applications.—Flexonics Corp. (Subsidiary of Calumet & Hecla, Inc.)

471 Metal Tube Bundles

"Dekoron Metl-Cor" consists of bundle of metal tubes contained in improved polyethylene outer sheath. Tubes are parallel and coded with numbers. Makes neater, economical installations without need of straightening tubes or time consuming testing of air lines.—Samuel Moore & Co.

472 Non-Corrosive Drain Line

Booklet gives information on integrated drain line system, including pipe, fittings, traps and sinks. Gives recommended uses, advantages, characteristics, layout and design. Dimensional information on fittings provided, accessories listed.—American Vulcathene, Div. of The Nalge Co., Inc.

473 Overhead Piping System

Catalog on prefabricated piping system for overhead distribution of steam, hot water, process liquids, refrigeration lines. Units consist of pipe and insulation covered with aluminum foil, over which are two wrappings of fiber glass cloth integrated within "Plasti-Clad" material. Prefabricated accessories listed.—Ric-wiL Inc.

474 Pipe and Tube Products

Publication B-1 gives information on brass and copper pipe, copper tubes and fittings. Includes sizes and weight tables for standard pipe and copper tubes. Discusses radiant panel heating and sanitary drainage lines.—Anaconda American Brass Co.

475 Pipe, Tubing for High Temperature

Six page brochure T 467 contains information on 15 steels widely used in high temperature service. Includes data on tensile properties, thermal conductivity and expansion, creep strength, oxidation resistance and other such mechanical and physical properties.—Babcock & Wilcox Co., Tubular Products Div.

476 Piping for Nuclear Applications

Twenty page brochure 60A, "Critical Piping for the Nuclear Age," describes piping, fittings, flanges, piping fabrication and erection work for nuclear piping systems.—Midwest Piping, Div. of Crane Co.

477 Plastic Coated Underground Piping

Plastic coated, prefabricated "Imperial" underground piping system for steam, hot water, process liquids and refrigeration lines. Units consist of pipe and insulation covered by spiral welded metal conduit coated with reinforced fiber glass cloth and cold-cured epoxy coating. Accessories included. Straight run sections prefabricated as required by job conditions.—Ric-wiL, Inc.

478 Plastic Electrical Conduit

New brochure gives installation and application data on three types of plastic conduit and fittings. Suitable for direct burial, concrete encasement or exposed application. Shows corrosion resistance factor, physical properties, test performance results.—Carlon Products Corp.

479 Plastic Pipe and Fittings

Sixteen page brochure 620 gives details on PVC plastic pipe and fittings. Includes applications, sizes, specifications for Schedules 40, 80, 120 and A pipe. Drawings, sizes of threaded and solvent weld fittings provided. Corrosion resistance table of 390 chemicals gives head losses, working pressures, expansion and contraction tables, recommended support spacing.—Carlon Products Corp.

480 Plastic Pipe, Fittings, Valves

Sixteen page booklet contains information on use of "Van-Cor 1" and "Van-Cor 2," chemical resistant, normal and high (respectively) impact, unplasticized polyvinyl chloride for pipe, fittings and valves. Contains schedule and flow charts, other data.—The Colonial Plastics Mfg. Co.

481 Plastic Piping

Four page folder TR-273A on ABS plastic pipe contains tabular data on physical properties, ratio working pressures, sizes and weights, including illustrations of various applications. Gives step-by-step description of recommended method for joining pipe.—Johns-Manville.

482 Plastic Tubing Harness

Literature deals with "Dekoron Protecto-Pac" all plastic harness with high resistance to welding splash sparks and flash fires. Has extra heavy 3/16 in. inner vinyl sheath serving as shock barrier as well as thermal barrier. Resiliency of heavy sheath cushions shock, increases life of core tubes.—Samuel Moore & Co.

483 Power Plant Piping

Sixty page bulletin 10 discusses power plant problems and application of manufacturer's products. Technical data and tables, including working stresses, radii, tangents and deflection of bends, saturated steam and superheated steam properties, steam flow, steam pipe insulation, weights and dimensions.—National Tube Div., United States Steel Corp.

484 Power and Process Piping

New 24 page bulletin 60-B features facilities and procedures for fabrication and erection of power piping systems and industrial process piping. Shows actual installations and equipment for producing carbon and alloy steel piping in all sizes.—Midwest Piping, Div. of Crane Co.

485 Prefabricated Conduit

New "Porter-Hayden" application and data file 4160 gives installation information on insulated prefabricated conduit for underground piping. Includes specifications on component units and quick-reference application guides for both single and multiple pipe conduit systems.—H. W. Porter Co.

486 Prefabricated Piping

Four page bulletin describes the specialized facilities in manufacturer's shops for prefabrication of both simple and complex piping assemblies to meet the most stringent specifications without waste and at costs known in advance.—Grinnell Co.

487 Prefabricated Underground Piping

Bulletin covers construction features for prefabricated, insulated, underground piping systems for steam, hot water, oil or refrigerated distribution lines. Systems include "Hel-cor," "Uniline," type J, low temperature and cast iron. Accessories: loops, elbows, gland seals, tees. Details on field connections, insulation types and thickness, trenching, cover height, conduit sizing.—Ric-wiL Inc.

488 PVC Drain Pipe

Four page folder contains data on application of "Tuftite" polyvinyl chloride plastic sewer and drain pipe. Shows where pipe can be used, gives installation instructions, sizes and dimensions, general information.—The Colonial Plastics Mfg. Co.

489 PVC Pipe

Forty page catalog contains corrosion ratings, information on thermal compensation, vacuum service, abrasion resistance, installation and applications. Methods of joining PVC to other piping materials diagrammed. Includes dimensional data and working pressure.—A. M. Byers Co.

490 PVC Pipe, Valves, Fittings

Polyvinyl chloride pipe fittings, flanges, valves and pipe are subjects of 16 page bulletin covering normal and high impact grades, features, characteristics, corrosion resistance recommendations, price comparisons, physical properties, fabrication, installation, pressures vs. temperatures, detailed dimensions, etc.—Grinnell Co.

491 Semi-Rigid Plastic Pipe

Twelve page booklet on SRK (semi-rigid) plastic pipe made from ABS material. For water service lines, drain and vent lines, with submersible pumps, sprinkler systems, industrial piping. Data on chemical resistance, pressure ratings, mechanical and physical properties and head loss, fittings, dimensions, joining procedure.—Republic Steel Corp.

492 Stainless Tubing and Pipe

Sixty page brochure STP-1 on "Electrunite" stainless steel tubing and pipe contains information on processing, properties of various analyses and laboratory corrosion data. Tells how to fabricate stainless tubing. Includes engineering data. Manufacturing operations and applications shown.—Republic Steel Corp., Steel & Tubes Div.

493 Standard Steel Pipe

Bulletin SPA-035-760 describes standard continuous weld and seamless steel pipe for transmission of air, gas, steam, water, oil and other fluids. Specified for commercial and industrial installations. Pipe being installed during construction shown. Specifications for various types of pipe given.—Youngstown Sheet and Tube Co.

494 Steam Condensate Return Lines

Twenty-three page special report on use of wrought iron pipe for steam condensate return lines spells out factors affecting corrosion, how oxygen and carbon dioxide affect piping systems, tells how to minimize corrosion. Gives numerous comparative service records.—A. M. Byers Co.

495 Steel Pipe Data, Specifications

Twenty page bulletin 509 describes the quality controlled manufacture of "Spang" pipe, giving case histories and telling how it helped get the job done easier, faster and more economically in different types of installations. Includes section on specifications for standard pipe.—National Supply Div., Armco Steel Corp.

496 Tube and Pipe

Booklet on tube and pipe for general construction covers the advantages and uses of copper water tube, DWV and "Dryseal" copper tube, red brass and copper pipe.—Revere Copper and Brass Inc.

497 Underground Conduit Systems

Specifications, dimensions and application data on "Therm-O-Tile" conduit for underground piping contained in new booklet 9156. Cross-sectioned drawings and step-by-step photos of

installation simplify conduit system design. Special dimension tables aid layout of underground distribution networks.—H. W. Porter Co.

When you use the reply card on pages 2-67 and 2-68 to request the literature you want, please circle clearly the corresponding item number on the card for each catalog or bulletin to be sent to you.

498 Vinyl Tubing Instrument Harness

Literature covers "Dekoron Poly-Cor" black vinyl tubing instrument harness. "Poly-Cor II" has black polyethylene sheath. Both light weight and flexible for easier, faster installation. Advantages include number coding, new all black polyethylene core tubes and "Mylar." Up to 37 tubes in each bundle.—Samuel Moore & Co.

Piping Specialties, Steam Traps, Expansion Joints, Pipe Hangers, Etc.

499 Air, Steam, Gas Purifiers

Bulletin 803 describes types L and LUS "Hi-eF" line purifiers for removing dirt and line scale from large pipe lines wherever clean, dry steam is essential. Same purifiers used for removal of moisture and dirt from small air, steam and gas pipe lines.—V. D. Anderson Co.

500 Ball Joints for Thermal Expansion

Eight page bulletin 31 shows use of ball joints for connections to boilers, burners, etc., where thermal expansion and/or contraction create piping problems. Line drawings, dimension tables and photographs are included to describe basic piping arrangements adaptable to almost any piping application.—Barco Mfg. Co.

501 Bellows Expansion Joints

Bulletin TT 1035 explains new concept in bellows expansion joint field. Cyclic life ratings based on results obtained by extensive testing program evaluating interrelation between bellows traverse, pressure and cyclic fatigue. Lists types, weights, dimensions and ratings for bellows expansion joints in sizes 3 through 30 in.—Tube Turns Div., Chemetron Corp.

502 Combination Steam Traps

"Heat Kwik" combination steam traps with separate orifices for air venting and condensate removal described in bulletin 260. Provide higher production on steam using units. Specifications and capacities provided.—V. D. Anderson Co.

503 Expansion Joint Engineering Guide

Absorbing thermal movement, anchoring and guiding piping systems are covered in new expansion joint engineering guide. Low pressure free-flexing and high pressure controlled-flexing expansion joints, ID sizes 3 to 24 in., listed. Design factors relating to temperature, motions, media, pressure discussed. Problems caused by movement in piping system considered.—Flexonics Corp. (Subsidiary of Calumet & Hecla, Inc.)

504 Expansion Joints

Six page bulletin on S-R expansion joints serves as guide to making inquiries for specific applications. Gives information on temperature and pressure ratings, flanges, liners, covers, etc.—Badger Mfg. Co.

505 Expansion Joints

Catalog and specification sheet on "Penflex" expansion joints show applications, advantages of expansion joints, and technical specifications on sizes from 4 to 20 in. ID.—Pennsylvania Flexible Metallic Tubing Co.

506 Fine Screen Strainers

Bulletin S-206 describes "Yarway" low pressure drop, in-line strainers for pressures to 1500 psi. Includes specifications, dimensions, weights, prices, selection tables. Covers strainers in five different body materials to 4 in. sizes with removable "Monel" screens.—Yarnall-Waring Co.

507 Flexible Ball Joints for Piping

Catalog 250 gives information on threaded, flanged and welding end, high temperature flexible ball joints. Dimensions, temperature and pressure ratings, available styles and application photos. Ball joints are used to handle thermal expansion or contraction and other applications where rigid piping must move.—Barco Mfg. Co.

508 Flexible Connectors for Expansion

Bulletin AX-97 describes A-X tubing for absorbing expansion and contraction in piping. Types of movement it handles, construction, properties, engineering data, ordering information, typical assemblies included.—Anaconda Metal Hose Div., Anaconda American Brass Co.

509 Flexible Rubber Expansion Joints

New six page catalog 888 describes hand fabricated GRC rubber expansion joints and flexible rubber pipe. Mechanical properties, dimensions, pressure and movement limitations for flanged, spool type expansion joints, 1 to 72 in. Lists applications of standard, reducing, filled arch and lined expansion joints for pressure; vacuum; pressure-vacuum service.—General Rubber Corp.

Be sure to type or print your name and address clearly when you request copies of these catalogs and bulletins.

510 Float-Thermostatic Steam Traps

Float-thermostatic steam traps, type F-T, recommended to drip steam mains, unit heaters, blast coils, heat exchangers and allied equipment are covered in bulletin 455.—Sarco Co., Inc.

511 Heating Specialties

Line of steam traps, temperature regulators and heating specialties described in new 12 page condensed catalog.—Sarco Co., Inc.

512 Hinged Closures for Pipe Ends, Vessels

Bulletin TT 1034 describes new, quick opening, hinged closure for blanking off pipe line ends, tank or vessel openings and numerous other applications where frequent access is required; suitable for ASME Code construction. Exclusive safety feature explained and operation advantages outlined. Contains design and engineering data.—Tube Turns Div., Chemetron Corp.

513 Impulse Steam Traps

New bulletin T-1743-B describes six types of impulse steam traps for every trapping need, including "Yarway" series 130 combining trap, strainer and blowdown valve in single body. Indicates proper traps for normal requirements, high pressures, light loads, extra heavy loads. Gives materials, capacities, dimensions and prices. Cites advantages for various services.—Yarnall-Waring Co.

514 Lined Expansion Joints

Construction sizes and uses of rubber, "Neoprene" and "Teflon" lined expansion joints explained in bulletin AD-137. Describes characteristics of spool type, rectangular type, U-type, all "Teflon," full-faced "Teflon" lined, and "Teflon" flexible couplings.—Garlock Inc.

515 Metal Flexible Pipe Assemblies

Bulletin IHC-Sec. 7AA describes all-metal flexible pipe for hot water or steam lines in heating plant or plumbing work to compensate for thermal expansion and piping misalignment. Includes data on PC3 pump and compressor connectors to absorb vibration and noise transmission.—Universal Metal Hose Co.

516 Metal Framing Handbook

Catalog handbook 710 on metal framing construction and maintenance contains information for the use of product in framing, supporting and attachment applications in the heating, piping and air conditioning field.—Unistrut Products Co.

517 Packless Expansion Joints

Seventy-six page catalog 59-50A on "Corruflex" packless expansion joints has 40 pages of engineering information on installation and operation, 30 pages of tables on dimensions, movements. Describes special types of packless expansion joints.—Adsco Div., Yuba Consolidated Industries.

518 Packless Expansion Joints

Packless expansion joints for water or steam are described in bulletin 65. Pipe sizes ¾ through 6 in., working pressures to 150 psig. All metal seamless bellows, multi-ply for greater flexibility at higher pressures and longer life are features of these joints. Brass, monel, stainless steel materials available.—Robertshaw-Fulton Controls Co., Fulton Sylphon Div.

519 Pipe Alignment and Support

New line of pipe alignment guides and roller pipe supports for use with expansion joints. Alignment guide is cast steel segmented spider sized to OD of pipe from ¾ to 24 in., free to move axially in segmented steel cylinder. Spider clamps to pipe while cylinder is fixed to support.—Flexonics Corp. (Subsidiary of Calumet & Hecla, Inc.)

520 Pipe Line Strainers

Bulletin 2000 describes Y type strainers for steam, air, oil, gas, water. Includes photographs, drawings, dimensions for screwed strainers ¼ to 2 in.—Frank D. Riggio Co., Inc.

521 Pipe Strainers

Twelve page bulletin 170 covers Y type pipe strainers fabricated from semi-steel, cast carbon steel, cast chrome moly WC6, forged chrome moly ASTM A-182, F22, bronze and stainless steel. Screwed, flanged buttweld, socket weld and "Silbraz" connections. Different types of screens described, with particle retention size detailed.—Armstrong Machine Works.

522 Rubber Expansion Joint

Literature introduces AMR anti-migration rubber expansion joint providing same flexibility but 60 percent more capacity and for withstanding higher working pressures than standard joints. Inner construction enables metal reinforcing rings to remain stable under pressure. Meets requirements of piping capable of withstanding flow surges and high pressure. Handles corrosive materials.—United States Rubber Co.

523 Rubber Expansion Joints

R/M rubber expansion joints absorb pipe movement and respond to the slightest pressure, thereby preventing stress and strain on pipe and fittings that may be trouble-makers in ventilating and air conditioning systems. They also insulate components against destructive vibration and noise while compensating for misalignment. — Raybestos-Manhattan, Inc., Manhattan Rubber Div.

524 Slip Type Expansion Joints

Catalogs 57-15 through 57-45 on every type of manufacturer's slip type expansion joint, including small joints, piston-ring externally-internally guided, piston-ring internally guided, internally guided with conventional guide, externally-internally guided with conventional guides and tie-rod type. Dimensions, list prices,

weights. Engineering information on installation, operation.—Adsco Div., Yuba Consolidated Industries.

525 Slip Type Expansion Joints

Twelve page bulletin EJ-1917 on "Yarway Gun-Pakt" expansion joints describes features and advantage of unique slip type joint. Gives dimensions, weights and other information for selection. Tells how to figure expansion of pipe lines; gives installation suggestions.—Yarnall-Waring Co.

526 Steam Traps

Features of and general information on steam traps given in catalog K. Shown are operation and dimensional drawings. Tables give specifications. Selection data includes capacity chart, graphs, tables and drawings.—Armstrong Machine Works.

527 Steam Traps

New catalog FE-310 provides details on "MIL" bi-metal thermostatic and float thermostatic steam traps available in variety of pressure ranges, body patterns, sizes and connections. Stainless steel, bi-metal thermal element assures precise control, continuous throttling action, minimum steam loss, dependable performance unaffected by water hammer, frost, corrosion or rough handling.—Farris Engineering Corp.

528 Steam Traps

"Sterlco" float and thermostatic traps and thermostatic radiator traps, both equipped with the "Sterlco" vacuum thermostat, described in bulletin 102-202. Construction enables traps, if damaged, to fail in closed position. Cold radiation indicates trap needs attention, reducing maintenance problems. All thermostatic elements external. Built for pressures to 100 psig. —Sterling, Inc.

529 Steam Traps

Bulletin 1400-M describes line of steam traps for steam and air. Contains information on standard traps, blast traps, and cast steel traps. Offers trap selection data, orifice charts, capacity tables, other specifications.—H. O. Trerice Co.

530 Suspension Fastener

"Gat Tap-Clip" for suspension of junction boxes, conduit, lighting fixtures, tubing and 3 x 4's from bulb tees covered on catalog sheet. Strap fits all bulb tees 1½ through 2⅜ in. wide. Design permits fast, easy installation regardless of insulation used. Ceiling not defaced when applied. Rustproof finish.—Erico Products, Inc.

531 Suspension Hangers

"Gat Tap-On" hanger for suspension from bulb tees listed in catalog. Design permits fast, easy installation regardless of insulation used. Ceiling not defaced when applied. Coated with rustproof finish. Recommended for load limits up to and including 150 lb per hanger.—Erico Products, Inc.

532 Tee Bar Hanger

New "Twist-Clip" tee bar hanger for mounting electrical fixtures to exposed acoustical ceilings described on catalog sheet. To install, push up and twist. Fits all tee bar widths. Withstands 400 lb straight pull, 100 lb load (based on 4-1 safety factor).—Erico Products, Inc.

533 Thermostatic Steam Traps

Bulletin 257 contains specifications and capacities on line of "Quik-Flex" thermostatic steam traps. Features large capacity covering wide pressure range, low maintenance due to one moving part, compact design, freezeproof guarantee for outdoor operation. Immediate delivery from stock.—V. D. Anderson Co.

534 Thermostatic Steam Traps

Bulletin describes bronze body, angle or straight through, ½ to 1 in. thermostatic steam traps and semi-steel body, angle or straight through, ½ to 2 in., for steam pressures from vacuum to 250 lb psi, temperature 450 F, without changing valves, seats. Bellows of phospher bronze or stainless. — Frank D. Riggio Co., Inc.

535 Water Hammer and Its Control

Eight page bulletin, "Water Hammer — Cause, Effect and Control in Piping Systems," includes technical data, pressure diagrams and conclusions on handling of surge pressures which result in water hammer.—Williams Gauge Co., Inc.

When you make use of the handy reply card on pages 2-67 and 2-68 to ask for copies of the catalogs, bulletins and other data reviewed here, please type or print your name and address clearly so that the information you want can be sent you without delay. And don't forget to include your name and address on the card! Some of the cards have been returned to us without this essential information.

Pumps and Pumping Equipment

536 Centrifugal Pump

Bulletin PC-261 supplies selection data and describes industrial centrifugal pumps in broad range of ratings. New C size pumps available up to 75 hp with capacities to 2000 gpm and heads to 170 ft. Feature removable bearing frame assembly and vertical split case design. Constructed for long life, efficient operation.—Bell & Gossett Co.

537 Centrifugal Pump Selection Guide

Guide 52C6059Q for selection of centrifugal pumps for many purposes, including heating, piping and air conditioning, describes various units and their construction features.—Allis-Chalmers Mfg. Co.

538 Circulators

Eight page brochure titled "So Simple It Has to be Trouble-Free" describes both models of "Perfecta" circulators. Applications, performance curves and specifications for models 150 and 152 given.—Taco Heaters, Inc.

539 Close Coupled Pumps

Bulletin 975-F gives information on mechanical and hydraulic features of close coupled pumps. Suitable for most pumping situations, especially in limited space. Interchangeability of parts permits low inventory. Application data included. Rating tables simplify selection.—Buffalo Pumps Div., Buffalo Forge Co.

540 Condensate Return Pumps

Bulletin K-200 describes line of condensate return pumps for low and medium pressure heating systems and steam process equipment. Also available are vacuum return pumps for heating systems in commercial, industrial, institutional and residential buildings.—Economy Pump Div., Hamilton-Thomas Corp.

541 Condensate Return Units

Bulletins 900 and 910 describe capacity, performance and capabilities of simplex and duplex condensate return units with cast iron or steel receivers for "wet" heating systems. Wide range of models and capacities. Can be converted to boiler feed use. Selection tables, specifications included.—The Weinman Pump Mfg. Co.

542 Condensation Pumps

The 4100-4200 series condensation pumps for low pressure systems up to 15,000 sq ft EDR are described in bulletin 700. Efficient, non-overloading centrifugal pumps for quiet operation. Three basic tank sizes for close adjustment to boiler water level. Steel or cast iron receivers. Built in simplex or duplex models with several different control systems.—Sterling, Inc.

543 Condensation Return Units

Eight page bulletin 114 describes type C condensation return units giving construction, features, capacities, dimensions, limitations and specifications. Features keyed and locked cast bronze impellers, low NPSH, stainless steel shafts and high efficiency ratings. For 1750 or 3500 rpm operation, capacities 500 to 150,000 EDR, 10 to 125 psi.—Aurora Pump Div., The New York Air Brake Co.

544 End Suction Centrifugal Pumps

Eight page bulletin 117 describes type GA end suction centrifugal pumps. Includes selection charts, dimensions, construction, limitations, and specifications. Feature interchangeable mechanical seal or insert, keyed impeller, low NPSH and vertical discharge. Capacities to 450 gpm, heads to 210 ft.—Aurora Pump Div., The New York Air Brake Co.

545 End Suction Centrifugal Pumps

Bulletin B-2300 covers line of economical horizontal end suction centrifugal pumps for general service. Capacities from 10 to 5500 gpm; heads to 260 ft; hp range, ¼ to 150. Versatile, will handle most types of liquids in diversified services.—Peerless Pumps, Hydrodynamics Div., Food Machinery & Chemical Corp.

546 General Service Pumps

Bulletin 100 covers type AC "Unipumps" designed to deliver efficient pressure boosting service, hot and chilled water circulation and to meet general purpose pumping requirements. Twenty-one different models with output ratings from 10 to 260 gpm.—The Weinman Pump Mfg. Co.

547 Horizontally Split Pumps

Forms 7248, 7057 and 7062 cover horizontally split line of pumps in single and two stage design. Various models for deliveries to 4000 gpm, heads to 1100 ft.—Ingersoll-Rand Co.

548 Horizontally Split Single Suction Pumps

Selection curves, layout dimensions, descriptive data and specification forms included in new engineering bulletin 98A on type S, horizontally split case, single suction, mechanical seal centrifugal pump. Meets requirements of heating, air conditioning and plumbing with capacities to 800 gpm, heads to 145 ft, speeds to 1750 rpm.—Chicago Pump Co.

549 Hot and Cold Water Pumps

Bulletin B-2100 describes general purpose, horizontal, centrifugal, split case "Aqualine" pumps for hot and cold water handling, circulation and boosting. Up to 8 in. discharge size. Capacities to 2600 gpm; heads to 350 ft. Dimensional data, selection charts for easy specification.—Peerless Pumps, Hydrodynamics Div., Food Machinery & Chemical Corp.

550 Immersible Non-Clog Pumps

Bulletin 1710 provides information on type M immersible non-clog pumps for handling sewage, drainage water and industrial wastes. Includes pump selection tables, specifications, features, installation diagrams.—The Weinman Pump Mfg. Co.

551 Motor Pump Units, Cradle Mounted Pumps

Forms 7093 and 7223 describe line of "Motorpumps" and cradle-mounted pumps with deliveries up to 3200 gpm, heads to 650 ft.—Ingersoll-Rand Co.

552 Pump Control and Level Indicator

Bulletin AC-100 describes "Vis-A-Trol" automatic pump control and liquid level indicator. Control system includes measuring device which shows depth of liquid in pit and permits comparison of pumping rate with in-flow at all times without looking into wet pit.—Weil Pump Co.

553 Pump Valve Units

Eight page bulletin describes valve units designed to fit any reciprocating pump, old or new, and includes descriptions of the component parts, pressure-temperature ratings, and a table of seat sizes and dimensions. Made in 17 sizes, these units meet over 300 variations in installation requirements.—Durabla Mfg. Co.

554 Pumps

Nema-matched "Adapt-Able" pump design saves disconnecting inlet and outlet pipes from the casing. Pump mounting dimensions are standardized with similar dimensions of driving motors. Vertical pump available as closed, semi-open, bladeless or non-clog. Described in brochure APEB 250.12—Fairbanks, Morse & Co., Pump & Hydraulic Div.

555 Pumps for Hot Water Heating

Design with external seal tube to stuffing box makes FCP end suction, flexible coupled pumps suitable for hot water heating systems through 250 F. Seal tubing may be used for fresh water flushing, cooling water circulating or vacuum sealing stuffing box. Bulletin 107H. Capacities to 900 gpm, heads to 275 ft.—Chicago Pump Co.

556 Rubber Lined Pumps

Bulletin 981 describes features, advantages of all rubber lined pumps for use with many corrosive liquids, including chlorinated brines, sodium chloride, potassium chloride, brine slurries, hypochlorous acid, hydrochloric acid, chlorinated paper stock, caustic soda, hydrofluoric slurry, others.—Buffalo Pumps Div., Buffalo Forge Co.

557 Screwed Connection Motor Pump Units

Line of screwed connection "Motorpumps" from 1/3 through 25 hp is described in forms 70022 and 70287. Compact units available in 1750 and 3450 rpm speeds for deliveries to 775 gpm with heads to 190 ft.—Ingersoll-Rand Co.

558 Sewage Pumping System

Bulletin FR-1000 announces new "Reverse-Flow" sewage pumping system available with vertical or submersible type pump. Unit designed to efficiently handle sanitary waste with the pump impeller handling only liquids.—Weil Pump Co.

559 Single Suction Pumps

Bulletin 976-G gives specifications on full ball bearing single suction pumps for handling saturated refrigerants and liquids in air conditioning, viscous fluids in petrochemical and process industries, corrosive liquids when of alloy construction, and many others.—Buffalo Pumps Div., Buffalo Forge Co.

560 Turbine Type Pumps

Bulletin 11B describes latest design features incorporated in new "Apco" turbine type pumps. Includes selection chart, limitations, construction, and specifications. Feature hydraulic balance with double suction design, single or multiple stage arrangement, wide operating range, mechanical seal or packing construction. Capacities to 150 gpm, pressures to 300 psi, temperatures to 275 F.—Aurora Pump Div., The New York Air Brake Co.

561 Vertical Non-Clogging Pumps

Bulletin 124 G shows the most important features of complete line of vertical enclosed shaft wet basin centrifugal sewage ejectors. Includes dimensions, selection tables, specifications. Capacities to 5000 gpm and heads to 95 ft.—Chicago Pump Co.

Your comments on this trade literature supplement to Heating, Piping & Air Conditioning will be most welcome, and we invite you to write us. We'd like very much to know if you find this service useful.

Address your remarks to Trade Literature Supplement, Heating, Piping & Air Conditioning, 6 N. Michigan Ave., Chicago 2, Ill. And thanks for your help.

Radiation, Surface & Coils

562 Baseboard Radiation

485 baseboard radiation offers advantages of being compact (6-11/16 in. high), inconspicuous, does not interfere with room decor. Room temperatures seldom vary more than 1 or 2 deg from floor to ceiling to assure comfort and economy.—The Rittling Corp.

563 Baseboard Radiation

New "5-1" baseboard radiation designed for heating applications. One enclosure serves five different heating elements for wide range of heat output. One cover fits all combinations. Unit snaps into place quickly, fits tightly, can be dismantled and re-assembled easily for neat, straight line appearance.—The Rittling Corp.

564 Cooling Coils

Bulletin 11 contains information on cooling coils. Includes "Sicromatic" charts and rule permitting direct graphical coil selection in seconds. One chart provides all data for a particular application, including proper refrigerant or chilled water temperatures.—Marlo Coil Co.

565 Design Procedure for Panel Heating

Booklet on simplified design procedure for residential panel heating enables one to determine the size of panel and the water temperature necessary to heat any room in a structure of normal construction.—Revere Copper and Brass Inc.

566 Direct Expansion Coils

Catalog 405-2 describes type 5X direct expansion coils. Engineered and designed for maximum heat transfer efficiency under all operating conditions. Contains data on coil selection, specifications, applications and dimensions.—McQuay, Inc.

567 Fin Tube Radiation

Line of fin tube radiation is covered in three bulletins: baseboard (1640), commercial and industrial (1650), sill-type (1660).—Sarco Co., Inc.

568 Heating Coils

Newly revised catalog 4560 describes line of heating coils. Discusses exclusive construction features with physical and performance data. Piping diagrams, architectural and engineering specifications included.—Young Radiator Co.

569 High Temperature Water Radiation

Twenty-four page bulletin describes HTW "PanelVectors," designed for direct utilization of high temperature water. Design, construction and features explained; benefits of high temperature water discussed; engineered heat distribution considered. Technical data section includes tables and charts of lengths, ratings, water flow, dimensions, surface temperatures, etc. —Shaw-Perkins Mfg. Co.

570 How Radiant Panel Heating Works

Booklet entitled "Radiant Panel Heating—Nature's Own Comfort System" explains how radiant panel heating works and how it compares with other heating systems in comfort, reliability, performance and economy.—Revere Copper and Brass Inc.

571 Institutional Radiation

Sixteen page bulletin 1-60 on institutional "PanelVectors" for room heat distribution discusses heating of hospitals and other buildings. Features are described, tables of lengths and ratings presented, mounting and end panel information given, specifications shown.—Shaw-Perkins Mfg. Co.

572 Integral Finned Tubing

Catalog outlines standards, specifications and manufacturing scopes of six types of "Trufin," integral finned extended surface tubing. Includes listing of heat exchanger industry applications and pertinent packaging data.—Wolverine Tube, Div. of Calumet & Hecla, Inc.

573 Radiant Baseboard Guide

Twenty-four page guide on "Base-Ray" cast iron radiant baseboard gives ratings and tables for sizes 7A and 9A. Detailed installation instructions, simplified assembly chart. Diagrams and information on FHA approved series loop system, now available with damper.—Burnham Corp., Heating & Cooling Div.

574 Radiant Heating, Snow Melting

Sixty-eight page bulletin 19 contains a practical discussion of radiant heating and snow melting, including heat losses, temperature studies, design data, questions and answers, methods of floor and ceiling installations, coil patterns, heat transmission tables.—National Tube Div., United States Steel Corp.

575 Radiant Heating, Cooling, Acoustical Ceiling

Sixteen page booklet describes principle of radiant heating and cooling with radiant ceiling providing uniform heat distribution with essentially no temperature variation floor to ceiling. Modular system affords design flexibility for layout, and lighting and ventilating systems. Op-

erates with standard hot water heating or water chilling equipment and standard controls.—Burgess-Manning Co.

576 Radiant Heating with Panel Grids

Brochure C-6 tells story of new machine-formed copper tube panel grids (PG's) for economical radiant panel heating installation. Explains radiant heat; gives information on use of ⅜ or ½ in. panel grids from engineering and layout design to finished installation.—Anaconda American Brass Co.

577 Steam Coils

Catalog 305 describes new line of type 5 steam coils. Designed for general purpose air heating and can be used for variety of heating and processing applications. Includes coil description, data on dimensions, general information, coil selection, engineering specifications.—McQuay, Inc.

578 Surface and Coil Radiation

Cast aluminum radiation element, especially adaptable for high pressures and where ruggedness and corrosion resistance are required, has patented 45 deg directional fin feature and chamfer shape. This makes high thermal efficiency possible in a compact radiation element, resulting in savings.—Wilson Engineering Corp.

579 Wall Mounted, Ceiling Hung Radiators

Sixteen page bulletin on "Airadiators" that are wall mounted or ceiling hung and are designed for commercial and industrial heating gives information on design and construction features. Tables of lengths and ratings, roughing-in dimensions, conversion factors, engineering notes, and suggested piping layouts included.—Shaw-Perkins Mfg. Co.

See the index on the front cover of this supplement to Heating, Piping & Air Conditioning for the classifications of products under which this literature is listed.

Refrigeration Equipment and Components for Air Conditioning

580 Air Conditioning, Refrigerating Equipment

Bulletin 79-A shows line of air conditioning, refrigerating, ice making and quick freezing equipment.—The Frick Co.

581 Air Conditioning, Refrigeration at Hotel

Vol. 32, No. 10 of house organ, features The Homestead, describing use of "Shell-Ice," and air conditioning and skating rink at Hot Springs, Va. Ski runs using artificial snow also described.—The Frick Co.

582 Air Cooled Condenser and Condensing Units

Literature discusses air cooled condenser and condensing units used in air conditioning or refrigeration systems. Includes methods for selection for economic and low maintenance operation. Description and performance data provided on "Fandaire" condensers and condensing units.—Yuba-Aimco Div. of Yuba Consolidated Industries, Inc.

583 Air Cooled Condensers

Bulletin F-4095 provides data on new line of low silhouette units preventing problems common to other air cooled condenser designs. Shipped as factory assembled packages. Vertical discharge gives accurate control regardless of wind. Has unique bypass damper head pressure control.—Buffalo Forge Co.

584 Air Cooled Condensers

Bulletin 300 presents new line of air cooled condensers in capacities from 2 to 120 tons. Engineering data for selection of units by evaporator capacity or by heat of rejection methods. "Limitizer" head pressure control system and multicircuiting described.—Bohn Aluminum & Brass Corp., Danville Div.

585 Air Cooled Condensers

New bulletin VC-103 introduces line of "V-Con" air cooled condensers available in capacities of 3 to 10 tons. Performance and specification data given for these vertical air discharge, low silhouette condensers. Housed in aluminum casings.—Halstead & Mitchell Co.

586 Air Cooled Refrigerant Condensers

Bulletin DC-61 describes "DriCooler" air cooled refrigerant condensers. Line includes range of sizes from 15 tons. Includes information on automatic damper control and pre-cooler for low temperature operation in high dry bulb areas.—The Marley Co.

587 Ammonia Valves, Accessories

Catalog 203 features stronger, lighter, smaller and with greater flow capacity ductile iron valves. Includes shut-off, flow check and hand expansion valves plus strainers for ammonia refrigeration and industrial applications. Connections generally range from ¼ through 6 in.—Henry Valve Co.

588 Centrifugal Fan Cooling Towers

Bulletin ECKB-601 gives operating and dimensional data for centrifugal fan cooling towers with capacities from 5 to 30 tons. Air discharge can be vertical or horizontal. Dimensions pro-

vided for take-apart models. Twenty year guarantee on wetted deck surface against failure due to rot or fungus attack.—Halstead & Mitchell Co.

589 Central Station A.C. Cooling Towers

Series 3 cooling towers for central station air conditioning and for light to medium industrial cooling, architecturally offer low profile with no orientation limitations. Pleasing design may eliminate need for decorative enclosures.—Flour Products Co.

590 Commercial Refrigeration Products

Brochure GCR 155.03 catalogs 199 low sides commercial refrigeration products for hot gas, water, electric defrost. Application and specification data given on "Flocold," "Spasaver," MCR meat cutting and packaging unit coolers. Evaporative condensers available in 5-120 nominal tons ("Freon" ammonia); air cooled condensers 3-80 tons.—Drayer-Hanson Div., Hi-Press Air Conditioning of America, Inc.

591 Cooling Tower Engineering Manual

Engineering manual 96-361 has data on cooling towers, models AJT and AST, outdoor, 5 through 120 ton capacity, and model AT, indoor, 20 through 100 tons. Includes general and mechanical specifications, capacities, selection procedures, installation arrangements, piping and control information.—Acme Industries, Inc.

592 Cooling Towers

Revised 28 page bulletin 207 covers line of fireproof cooling towers from 10 to 800 tons in single, factory-assembled units. Engineering drawings, capacity and performance data, selection tables, and description are given for blow-through, draw-through, centrifugal fan, and tubeaxial fan models.—Baltimore Aircoil Co., Inc.

593 Cooling Towers

Bulletin 5683 covers "Watertemp" cooling towers, low head gravity flow type, all hot dipped galvanized construction, in frame sizes 5 to 300 tons.—Binks Mfg. Co.

594 Cooling Towers

Bulletin AC-61 describes "AquaCoolers" available in capacity range up to 180 tons, nominal. For either indoor or outdoor operation, blower fans operate quietly. Casings and basins hot dip galvanized after fabrication. Smaller units ship completely assembled, larger units in two easily joined sub-assemblies.—The Marley Co.

595 Cooling Towers

Bulletin CT-61 describes "CompacTowers," new series of cooling towers for services of 100 tons and up. Feature restricted plan area and low operating weight. Completely factory assembled. All models have uniform height, width. Combination of models can be readily joined for multi-cell installations.—The Marley Co.

596 Crossflow Cooling Towers

Series 2 crossflow cooling towers are induced draft, horizontal air flow units designed to meet tower profile requirements. Standard single cell installations from 60 to 300 tons offered for air conditioning and refrigeration. Combinations of standard cells may be used to meet greater cooling requirements.—Fluor Products Co.

597 Dry Blower Cooling Towers

Bulletin 478 describes dry blower, hot dipped galvanized cooling towers with capacity range of 5 to 250 tons of refrigeration. Selection data furnished.—Binks Mfg. Co.

598 Evaporative Condenser Engineering Manual

Revised bulletin 143 covers theory, construction, selection, installation, ducting, refrigeration piping and capacity control of evaporative condensers. Schematic drawings illustrate evaporative condenser operation along with psychrometric and entropy diagrams. Selection diagrams for refrigerants 12 and 22 and ammonia under both dry and wet operation. Pipe sizing tables.—Baltimore Aircoil Co., Inc.

599 Evaporative Condensers

Twenty-four page bulletin 107 covers line of evaporative condensers from 10 to 700 tons in single, factory-assembled units. Engineering drawings, capacity and performance data, selection tables, and description given for blow-through, centrifugal fan, and tubeaxial fan models.—Baltimore Aircoil Co., Inc.

600 Evaporative Condensers

Line of evaporative condensers detailed. Twelve page bulletin includes construction features of both VXF and VSC types with data and dimensions, performance charts and typical installations. Condensers are available for refrigerants 12, 22 and ammonia and are offered in capacities of from 30 through 360 nominal tons.—The Vilter Mfg. Co.

601 Expansion Valves, Controls, Accessories

Catalog contains installation, application, tabular and descriptive information for sizing and selecting thermostatic expansion valves, refrigerant distributors, filter-driers, solenoid valves, suction line regulators, hot gas bypass valves, float switches, high side float valves, evaporator controls and reversing valves for all refrigerants and all applications.—Alco Valve Co.

602 Field Test for Hermetic Burnouts

Twelve page brochure, "Simple Field Test for Hermetic Burnouts," explains step by step method for testing contamination and cleaning of refrigeration and air conditioning systems after hermetic motor burnouts, using "Genetron" 11 as the solvent.—General Chemical Div., Allied Chemical.

See the index on the front cover of this supplement to Heating, Piping & Air Conditioning for the classifications of products under which this literature is listed.

WHEN USING REPLY CARD

When you use the reply card on pages 2-67 and 2-68 to request the literature you want, please circle clearly the corresponding item number on the card for each catalog or bulletin to be sent to you.

The item number is the big number at the left of the title for each item. For example, in the item immediately below, the number to circle on the reply card would be 603.

603 Filter-Driers

Sixteen page bulletin 40-10 gives capacity, selection and installation information for sealed model and replaceable core type "Catch-All" filter-driers for refrigeration and air conditioning application. Enumerates damaging effects resulting from moisture, acids and sludges in system. Recommends clean-up procedures after a hermetic motor burnout.—Sporlan Valve Co.

604 Flow Control Valves, Accessories

Catalog 104 lists over 400 assorted types and sizes of packed and packless shut-off, pressure relief and flow check valves; sealed and cartridge "Dri-Cor" filter-driers; liquid and "Dri-Vue" moisture-liquid indicators and accessories for refrigeration, air conditioning and industrial applications.—Henry Valve Co.

605 Gas Engine Driven Water Chilling Systems

Form L160.25-S contains specifications on series T "Turbomaster" water chilling systems with gas engine drive. Capacities from 90 to 600 tons. Describes compressor, condenser, chiller and engine.—York Corp., Subsidiary of Borg-Warner Corp.

606 Heat Pump Check Valves

Technical bulletin A-1 describes multi-duty check valve engineered for the heat pump and featuring teflon seats. Will not chatter even under very low flow. Instant-acting for extremes of temperatures and pressures; hermetically sealed. Ten million cycles at 350 psi show no appreciable wear. Range is ½ through 20 tons.—Chatleff Controls, Inc.

607 Induced Draft Cooling Towers

Bulletin 6100 describes new 5K series induced draft cooling towers with low silhouette design, in capacity range 150 to 840 tons of refrigeration. Standard hot dipped galvanized construction with alternate side panel materials, including "Transite."—Binks Mfg. Co.

608 Industrial Cooling Towers

Literature describes F-60 industrial cooling towers for heavy duty requirements. Modular design and prefabrication construction provide ease and speed of erection, cooling capacity to meet industrial demands, and fast delivery anywhere.—Fluor Products Co.

609 Latent Heat Storage Unit

"Ice-Cel" latent heat storage unit detailed in catalog section BAE. Provides chilled water for short term, high peak cooling in churches, mortuaries, lodge rooms, cafeterias, etc. or as booster for existing under-capacity systems. Available with insulated tank or as plate banks, or individual plates for tanks built on location.—Dole Refrigerating Co.

610 Leak Detection

Bulletin 35 on leak detection with "Freon-12" discusses its use for detecting leaks, methods of detection and calculation of refrigerant-air mixtures.—E. I. du Pont de Nemours & Co., Inc., Organic Chemicals Dept.

611 Moisture and Liquid Indicator

Bulletin 70-10 describes use of a "See All" for viewing the amount and quality of liquid refrigerant in system. Full view sight glass incorporates large indication dot to calibrate moisture content of refrigerant by various color changes. Wide color ranges between "wet" and "dry" prevent misreading.—Sporlan Valve Co.

612 Multi-Drive Compressor Units

Twenty-eight page catalog 790 contains specifications for semi-hermetic, direct drive and belt drive compressors and condensers from 10 through 100 hp, for air conditioning and refrigeration. Includes mechanical specifications, product selection data, capacity ratings, loading and correction factors, dimensions, capacity control.—Dunham-Bush, Inc.

613 No-Frost Freezing and Storage

Bulletin 105 shows improved apparatus to prevent frost accumulation on refrigerated coils of large scale freezing or cold room installations. Disposes conveniently of condensed moisture and is automatic. Provides refrigeration with rapid chilling of products and assured holding of low temperatures.—Niagara Blower Co.

614 Package Condensing Unit

Bulletin C-640 presents air cooled package condensing unit. "Unicon" compressor is water-free, compact, aluminum sheathed; light weight design gives low installation cost and maximum architectural flexibility in outdoor installations. Operates year 'round anywhere in U.S. Features service ease and freedom from corrosion problems. Available in capacities 15 to 65 tons.—Kramer Trenton Co.

615 Packaged Liquid Chillers

Bulletin RS10W on packaged liquid chillers available from 7½ through 125 tons with direct drive compressor, semi-hermetic compressor (single or multiple), or open reciprocating compressor (single or multiple). Minimize floor space, reduce design and engineering time. Installation requires only setting, adding refrigerant and connecting water and electrical lines.—Curtis Mfg. Co.

616 Packaged Liquid Chillers

Bulletin 510 features packaged liquid chillers and gives engineering details of 10 sizes of chillers used for cooling water and other liquids. Three largest sizes of units have two refrigerating machines each.—The Frick Co.

617 Packaged Liquid Coolers

Four new catalogs cover redesigned water chillers. GPLC, 16 pages, on features and design characteristics. TPLC, 12 pages, specifications and ratings on 7½ to 15 ton "Unibuilt" chillers. SUPLC, 16 pages, specifications and ratings on 20 to 75 ton units. Dual units, capacities 60 through 150 tons, in DUPLC.—Bell & Gossett Co.

618 Packaged Water Chillers

Information on RG line of compact, light weight, packaged water chillers included in catalog 91-515. Construction, specification, capacity and dimensional data detailed for all nine models. Cooling capacities from 3 to 30 tons.—Acme Industries, Inc.

619 Reciprocating Compressors

Information on reciprocating type refrigerants 12 and 22 compressors is given. Offered in capacities of from 20 hp through 200 hp, these high speed 2, 4, 6, 8, 12 and 16 cylinder machines are described in a 12 page bulletin. Construction features, dimensional data, application possibilities included.—The Vilter Mfg. Co.

620 Refrigerant Compounds

Bulletin B-2 on "Freon" compounds describes properties and applications of refrigerants. Includes table of physical properties and vapor pressure chart for several commercial and semi-commercial products.—E. I. du Pont de Nemours & Co., Inc., Organic Chemicals Dept.

621 Refrigerant Sealer

Refrigerant sealer for tubes and liner entries is described. Unretouched photos compare "Wat-R-Bar" with conventional sealing compounds in 45,000 high frequency freeze-thaw cycling test. Reveals new sealant's long resistance to vapor and temperature extremes.—Presstite Div., American-Marietta Co.

622 Refrigerant Service Cylinders

Refrigerant-22 is available in new light weight blue cylinders. Save time, easy to handle. Liquid and gas charging heads. Valve wheels attached. New finger-operated valve outlet nuts eliminate use of wrenches. Space saved by stacking. Sizes: 15, 25, 50 lb.—Pennsylvania Engineering Co.

623 Refrigerants

Four page technical data bulletin describing physical properties and uses of "Ucon Brand" refrigerants—grades 11, 12, 22, 113 and 114. In addition, one page insert is enclosed listing product quality specifications of these refrigerants. —Union Carbide Chemicals Co., Div. of Union Carbide Corp.

624 Refrigerated Truck Holdover Equipment

Condensed catalog 48 describes and lists capacities of line of refrigerated truck holdover equipment and accessories, vacuum plates, hot gas defrost re-evaporators, ice accumulators for short term high peak cooling loads and double contact plate food freezers.—Dole Refrigerating Co.

625 Refrigeration Accessories

Catalog 104-AC features "Gold Seal" line tapping valves, adjustable line tapping valves, "Strain-o-Kaps," hermetic compressor terminal seals, charging hoses and testing manifolds. Designed to speed service operations and to make more profitable calls per day.—Henry Valve Co.

626 Refrigeration Instruments and Valves

Catalog 76-R shows line of refrigeration gages and thermometers, as well as regulating valves and solenoid valves.—Marsh Instrument Co., Div. of Colorado Oil and Gas Corp.

627 Refrigeration Systems

Bulletin C484 covers "Thermobank" factory packaged refrigeration and defrost systems featuring fast, time tested, economical defrosting. Exclusive design prevents liquid return to compressor, eliminates oil foaming and delivers greatest Btu per connected kilowatt load. Sizes 1 to 75 hp for −20 to +45 F rooms.—Kramer Trenton Co.

628 Remote Air Cooled Condenser

Remote type air cooled condenser covered in bulletin U391. Water-free design eliminates corrosion problems while delivering low cost efficiency. "Unicon" features low operation weight, low noise level and no efficiency loss over extended periods. Capacity ratings for selection. Cold weather pressure controls available.—Kramer Trenton Co.

629 Removing Refrigerants from Containers

Bulletin 11C on handling of one-ton containers of "Freon" fluorocarbon compounds explains methods of removing products from containers by heating and pumping. Vapor removal also discussed.—E. I. du Pont de Nemours & Co., Inc., Organic Chemicals Dept.

630 Water Chiller-Heater

New four page brochure presents design and application features, specifications on model DF-3000 direct gas fired absorption (25 ton) water chiller-heater. Application data booklets, including wiring and piping diagrams, also available. —Arkla Air Conditioning Corp.

When sending your requests, please be sure to type or print your name and address clearly.

631 Water Cooling Towers

Line of water cooling towers is described in catalog. Capacity ranges of 5 through 550 tons in single cells. Construction features and information on special coatings along with performance, capacity and dimension data are given in this catalog.—Bloomer Cooling Tower Div., Fiske Co.

632 Well Water Air Conditioning

Bulletin W-1 on equipment to use well water or cold city water under 70 F as direct cooling medium. Cuts initial cost by 40 percent, operating cost by 70 percent. Permits cooling with 100 percent fresh air. For bowling alleys, restaurants, shopping centers, supermarkets, factories, motels, hospitals.—Hastings Air Control, Inc.

Sound & Vibration Control

633 Acoustical Panels

Bulletin 47 describes perforated metal lay-in panels for modern acoustical ceilings and shows typical installations. Panels meet federal specifications for incombustibility and have glare-free baked-on finish which is easily washed and is not affected by moisture or any probable change in temperature.—Diamond Mfg. Co.

634 Air Conditioning Silencers

Four page bulletin 2166 presents line of "Aircoustat" products including standard duct sound traps, circular silencers, return air vent silencers and cooling tower silencers.—Koppers Co., Inc.

635 Air Flow Silencers

Eight page catalog 160 describes "Uni-Silencer" air flow silencers for air conditioning systems to silence airborne fan noises. Tables give application data, list acoustical efficiency, pressure drops and selections for specific criteria. Catalogs other silencers for cross talk purposes, silencing roof ventilators. All guaranteed and bonded.—Elof Hansson, Inc.

636 Flexible Connectors for Heating Systems

Bulletin FP-5 describes "Flexpipe" connectors in sizes ¼ through 2 in. for absorbing line vibration, taking up piping travel and connecting outlets which do not line up in wet heating systems. Construction details, specifications, typical installations and advantages of use shown.—Anaconda Metal Hose Div., Anaconda American Brass Co.

637 Functional Ceiling

Bulletin 138-3 describes self-contained suspended ceiling offering radiant panel heating, cooling and acoustic control. Radiant ceiling components shown with data on design procedures, controls, etc.—Burgess-Manning Co.

638 Heat and Sound Barrier

Bulletin 55-100 deals with the thermal-decibel barrier, a factory-assembled, self-supporting structural panel incorporating into one unit thermal insulation, vapor seal and acoustical attenuation. Designed for various temperature differences, have tested ratings of 85 NRC. Installations, both weatherproof and interior, serve communications, hospital and industrial buildings.—Air & Refrigeration Corp.

639 Hydraulic Vibration Snubbers for Piping

Bulletin 229A describes hydraulic cylinder snubber units designed to restrict rapid vibration and momentary shock loads without limiting normal thermal expansion movements. Eliminate annoying noise and dangerous vibration stresses in piping assemblies, vessels and stacks. Examples, diagrams included.—Barco Mfg. Co.

640 Pump and Compressor Flexible Connectors

Bulletin FP-4 describes "Flexpipe" connectors in sizes through 16 in. for absorbing vibration and travel in piping near pumps and compressors. Gives construction, typical installations, engineering data on tin-bronze, hot-dipped galvanized steel and stainless steel connectors. Shows variety of end fittings available.—Anaconda Metal Hose Div., Anaconda American Brass Co.

641 Return Air Vent Silencers

"Aircoustat" return air vent silencers are treated in four page bulletin 2000. Performance data on noise reduction and air flow plus sizes and dimensions given for three configurations. Blocks noise without blocking air flow through transfer grilles.—Koppers Co., Inc.

642 Rubber Flexible Pipe Connectors

Two page bulletin RFP-10 describes styles RFE flanged rubber pipe connectors and MM threaded end connectors for controlling pump and compressor vibration. Sizes ¾ through 20 in. diameters. Temperatures to 250 F, pressures to 250 psi.—Vibration Mountings and Controls, Inc.

643 Silencer Selection Chart

"Uni-Silencer" selection chart explains how to select silencer. Examples of efficiencies given with directions. Based on actual job-performances of installations in modern office and industrial buildings. Plastic coated card has three data charts on high pressure systems, centrifugal fan pressures, pressure drop vs. air flow, silencer models available.—Elof Hansson, Inc., Acoustical Div.

644 Steel Spring Mountings

New two page bulletin C-10 describes series C "Spring Flex" cast telescoping housings containing one or more steel springs, leveling feature, resilient guides. Static deflections to 1½ in., capacities 25 to 15,600 lb.—Vibration Mountings and Controls, Inc.

645 Sound Control

Catalog 61 lists architectural and mechanical sound control products from decorative interior designs to mechanical equipment silencers. Contains dimensions, sound absorption figures, sound isolation figures plus installation and maintenance recommendations. Products listed according to use.—Elof Hansson, Inc.

646 Vibration Controls

Four page bulletin VAC-13 describes application of proper vibration controls to air conditioning and heating problems encountered in modern buildings.—Vibration Mountings and Controls, Inc.

Tools & Machines

647 Air and Electric Power Tools

New 74 page catalog on "Sioux" air and electric impact wrenches, drills, screwdrivers, nut runners, sanders, grinders, electric polishers, flexible shafts, portable saws, and abrasive discs. Of special interest are impact wrenches for removing and replacing bolts on condenser heads, heat exchangers, boiler feed pumps, boiler feed controls etc.; also portable electric pipe threader. —Albertson & Co., Inc.

648 Automatic Contour Cutter

Automatic pipe cutting machine cuts curve of intersection of joining cylinders without manmade forms, cams or templates. Three sizes to cut up to 24 in. pipe. Uses oxy-acetylene for carbon steel pipe or tungsten arc cutting torches for aluminum and stainless.—Steffan Mfg. Corp.

649 Automatic Hole Cutters

Literature lists line of machines for cutting circular openings in pipe, tank or flat plate. "Universal" model cuts holes from 90 to 45 deg to center line of run pipe. Model ST perpendicular cuts openings at 90 deg to run pipe only. Sizes to 24 in. diameter.—Steffan Mfg. Corp.

650 Cement-Lined Pipe Beveling Machine

Four page fact sheet on new tool for beveling cement-lined pipe with minimum of concrete chipping gives development history, use and various applications—including new uses on high alloy steel pipe.—H & M Pipe Beveling Machine Co.

651 Concrete Drilling Machines

Brochure depicts line of concrete drilling machines with power options as gasoline, air and electric, utilizing three types of diamond coring bits to continually produce lowest cost per hole. Literature also available on application of newly designed equipment for installation of centerline lighting installations.—Molco Drilling Machines, Inc.

When sending your requests, please be sure to type or print your name and address clearly.

652 Bevel-Land Grinder

Fact sheet on new "Bevel-Land" grinder gives information on various applications, ease and speed of operation and sizes.—H & M Pipe Beveling Machine Co.

653 Cutting and Beveling Machines

Catalog covers cutting and beveling machines, the "Bevel-Land" grinder, shape cutter, "Out-of-Round" flexible shaft, motorized units, pipe dollies and all-aluminum metal boxes to house manufacturer's units.—H & M Pipe Beveling Machine Co.

654 Diamond Drilling Operations

Two page leaflet, "Diamond Times," tells job stories, shows photos of industrial diamond drilling operations. Includes photos and articles on new industrial products.—E. J. Longyear Co.

655 Drill Anchors

Catalog sheet DA-01 contains information on drill anchors for use with hand, air or electric hammers. Suitable for hanging piping and sprinkler systems. Specifications given, drawings show typical applications. Chart shows maximum pullout loads for various sizes of drill anchors.—Omark Industries, Inc.

656 Equipment Hoist

"Hoist-It" portable two man equipment lift described in bulletin HST-1. Raises 4000 lb up to 18 ft or 2000 lb up to 24 ft. Accessories for lifting attic units and roof-mounted equipment. For hoisting air conditioners, unit heaters, ventilators, cooling towers, condensers. Handles any width unit.—Hastings Air Control, Inc.

657 Fasteners and Stud Gun Accessories

Eight page catalog shows 43 different types of fasteners designed specifically for economical, rapid fastening into concrete and steel. Also shows accessories and various powder loads available for use in "Ammo" stud gun.—Drive Pins, Inc.

658 Flexible Connectors

Catalog and specifications sheet supplies data on flexible connectors in sizes ½ to 12 in. Provides maximum temperature ranges, operating pressures, maximum offset data on "Penflex" flexible connectors.—Pennsylvania Flexible Metallic Tubing Co.

659 Guide to Cutting Masonry Anchoring Costs

Selecting right masonry anchor and anchoring method may substantially cut air conditioning and ductwork installation costs. Guide to masonry anchors and anchoring methods for all-around economy explains technical factors, how to estimate anchoring costs.—The Rawlplug Co., Inc.

660 Hammer Core Bit Accessories

Folder on hammer core bit accessories details company's "lowest cost per hole" method of drilling 1¼ to 3½ in. holes in masonry using "Roto-Hammers" and percussion type, hollow core carbide bits. Contains specifications and prices.—Skil Corp.

661 Hammer-In Fastening Tools

Six page catalog B-145 shows line of tools and fasteners, including "Shure-Set" light duty fastening tool which operates on "needle-in-a-coin" principle, requires no cartridge, makes every hammer blow more effective, and sets drive pins and threaded studs in concrete, masonry and building block.—Ramset Fastening System, Winchester-Western Div., Olin.

662 Industrial Diamond Drilling Equipment

Eight page bulletin 321 describes industrial diamond drills, bits and accessories. Cut through reinforced concrete, terrazzo, brick, tile, and stone. Excellent results reported in cast iron, glass and asphalt.—E. J. Longyear Co.

663 Light Weight Pipe Bender

Four page bulletin E-249 describes new 777 light weight segment bender for 1¼ through 4 in. steel and aluminum pipe. Weighs only 65 lb exclusive of shoes. With a few optional parts it also makes 90 deg one-shot bends in ½ through 2 in. pipe sizes. Hand or power pump operated.—Greenlee Tool Co.

664 Masonry Anchoring Handbook

Revised, enlarged handbook provides information on masonry anchoring for engineers, contractors and industrial users. Pocket-sized, has tables showing proper anchors for each type of fixture and material, describes anchoring and drilling methods.—The Rawlplug Co., Inc.

665 More than 60 Timesaving Tools

Bulletin E-240 covers more than 60 timesaving tools, including light weight hydraulic pipe benders; hydraulic pipe pushers; portable, high pressure hydraulic power pumps; power bits; pipe bits; auger bits; chisels and allied tools.—Greenlee Tool Co.

666 Pipe and Conduit Tool Guide

Handy guide to line of pipe and conduit tools is found in folder entitled, "Finger-Tip Facts on 'Ridgid Work Saver' Pipe Tools." Contains illustrations, specifications and different sizes of products listed. Thumb indexed.—Ridge Tool Co.

667 Pipe Dollies

Literature catalogs line of light and heavy duty pipe support dollies for outboard support while cutting full lengths of pipe. Unique model running on inverted angle iron floor rails provides unrestricted floor area when not in use.—Steffan Mfg. Corp.

668 Powder Actuated Fastening Tools

Twelve page catalog B-141 shows line of "Jobmaster" powder actuated fastening tools, drive pins, threaded studs and powder charges; gives diagrams, charts and application drawings which explain in easy-to-read terms operating principles, scope, versatility, speed and accuracy in fastening with powder actuated tools.—Ramset Fastening System, Winchester-Western Div., Olin.

669 Powder Actuated Fastening Tools

Application manual B-125 details fast, efficient method of anchoring pipe hangers used in suspending various types of piping to steel and concrete. Tools and drawings are included as are specifications on sprinkler and water systems, waste lines and others.—Ramset Fastening System, Winchester-Western Div., Olin.

670 Powder Actuated Stud Driver

Folder ASD-20 describes powder actuated stud driver. Shows applications such as anchoring baseboard radiators, hanging pipe from steel or concrete, suspending sheet metal ductwork, fastening sprinkler systems.—Remington Arms Co., Inc.

671 Powder Actuated Tools

Eight page catalog 8-29R2 describes line of "Drive-It" powder actuated tools for fastening to concrete and steel. Lists and describes drive pins and explains applications for each. Shows accessories. Fastens ductwork to concrete ceilings or steel beams rapidly and economically. Special guards available for fastening ductwork suspended by sheet metal straps.—Omark Industries, Inc.

672 Power Saws

New brochure describes latest line of power saws including new versions of three worm-drive saws, a 6½ in. top handle model, two-speed jig saw, two-speed reciprocating metal cutting hacksaw and improved version of all-purpose

reciprocating saw. New "Burnout-Protection" motor claimed to withstand excessive, frequent overloading.—Skil Corp.

673 Reciprocating Saws

New brochure on two "Recipro" saws lists features of new metal cutting hacksaw and improved all-purpose (wood, plastic and metal cutting) model. Includes specifications plus data on 24 different blades.—Skil Corp.

674 Self-Drilling Anchor

"Saber-Tooth" masonry anchor drills its own hole. Folder explains "core drill" action cutting drilling time and cost. "Duratherm" heat treating makes the anchor hard enough to cut tough concrete yet expand for high holding power.—The Rawlplug Co., Inc.

675 Stud Drivers and Accessories

Catalog ASD-01-1 shows line of powder actuated stud drivers, accessories and equipment for heating, piping and air conditioning applications. Illustrates tools, types of studs, special guards. Gives helpful information to contractors.—Remington Arms Co., Inc.

676 Stud Driving

Booklet ASD-28 shows how to select proper stud and power load for "Power Mate" 455A stud driver with K-1 "Captive Stud" kit. Sixteen pages of information gives contractors' assistance on faster fastenings in heating, piping and air conditioning tasks.—Remington Arms Co., Inc.

677 Stud Gun and Fastener Accessories

Brochure on fastening system shows model S stud gun, line of accessories and numerous applications. Continually provides split second fastening into concrete and steel.—Ammo Products, Inc.

678 Tools for Pipefitters

Bulletin H-308 contains information on the most widely used tools in the woodworking line. Of particular value to pipefitters, the booklet describes over 75 tools including power, solid-center, auger, expansive and car bits; chisels; gouges; screwdrivers, and other tools.—Greenlee Tool Co.

See the front cover of this Trade Literature Supplement to Heating, Piping & Air Conditioning for the index by products to these listings.

Unitary Air Conditioning

679 Air Conditioner

The "Roommate II" for offices, hotels, apartments and hospitals incorporates new "Humid-a-Guard" control system guarding against humidity at reduced loads, while the air volume stabilizer damper permits introduction of outdoor air at unit without unconditioned air blowing into the room.—John J. Nesbitt, Inc.

680 Air Conditioner

Four page folder describes new EC compact air handling unit which provides efficient, quiet cooling and heating for shops, small stores, restaurants, offices and apartments. Technical data for each of the five models. Available in three styles: horizontal deluxe, horizontal standard, vertical standard.—Thermal Engineering Corp.

681 Air Conditioner Certification

Sixteen page booklet entitled "A New Assurance" describes the Certification Program for Unitary Air Conditioners initiated and administered by the ARI.—Air-Conditioning & Refrigeration Institute.

682 Air Conditioning Equipment

One hundred and ninety-eight units listed on reference chart showing line of unitary air conditioners, heat pumps and furnaces. Easy reference in determining right unit for particular job.—Typhoon Air Conditioning Co., Div. of Hupp Corp.

683 Air Conditioning, Heating

Eight page brochure LL 352-10 includes line of split system and packaged residential air conditioning, gas and oil fired furnaces, heat pumps and commercial water and air cooled air conditioning.—Airtemp Div. of Chrysler Corp.

684 Air Conditioning Products

Brochure GAC 150.01 catalogs 430 air conditioning products of this "since 1910" manufacturer for industrial, commercial, military applications. Includes quick selection data on central station, high/low pressure air handlers; condensing units (evaporative and air cooled); cooling towers; coils ("Freon," water, steam, ammonia).—Drayer-Hanson Div., Hi-Press Air Conditioning of America, Inc.

685 Air Conditioning Units

Twenty page technical bulletin 6014A describes CR year 'round room air conditioners for multi-room buildings to permit individual control without affecting other rooms, zones. For heating and cooling by water, direct expansion or steam. Model details, rating and dimensional tables, wiring diagrams, selection data, capacity curves, pressure drop data.—Dunham-Bush, Inc.

686 Air Conditioning Units

Folder lists line of units, giving descriptions and exclusive features. Aids selection of proper product for every application. Can be used as handy guide when specifying.—Typhoon Air Conditioning Co., Div. of Hupp Corp.

687 Air Cooled Split System Equipment

Line of air cooled split system equipment ranging in capacities from 3 to 20 tons.—United States Air Conditioning Corp.

688 Air Handlers

Condensed bulletin J-0531 describes air handlers with capacities of 3 to 92 nominal tons. Shows available mounting and air discharge arrangements, various accessories, gives basic performance data for fan-coil units. Three coil face areas offered for each of the 15 sizes. Gives choice of rows of coil depth and fin spacing of 6 to 10 fins per in.—Halstead & Mitchell Co.

689 Air Handling Equipment

Sectional constructed air handling units for cooling, heating, ventilating, humidifying, dehumidifying and filtering, either single or multiple zone. —United States Air Conditioning Corp.

690 Air Handling Unit

Versatile 939 air handling unit can be used in upflow, horizontal or counterflow applications. Available in 2, 3, 4 and 5 ton capacities for use with remote air cooled condensing units. Optional electric heat package available for use on 939's.—Mueller Climatrol, Div. of Worthington Corp.

691 Air Handling Units

Catalog 6011C lists 26 compact models for cooling, heating and humidity control with overlapping range of air deliveries from 1000 to 38,400 cfm. Coil information and selection tables, dimensions, engineering section, climatic conditions, psychrometric chart, specifications.—Dunham-Bush, Inc.

692 Blower Evaporators

Dimensional and capacity information about blower evaporators given in bulletin 230. The CH line is available in six horizontal units with cooling capacities from 2 to 15 tons. Available with steam, water and direct expansion coils.—Bohn Aluminum & Brass Corp., Danville Div.

693 Central Air Conditioning

Notebook type engineering catalog describes and has selection data on central plant conditioners, multizone conditioners, sprayed coil units, heating-ventilating units, cooling and heating coils. —Thermal Engineering Corp.

694 Central Air Conditioning

Six page folder briefly describes central plant conditioners, multizone conditioners, sprayed coil units, heating-ventilating units, cooling and heating coils, high pressure air conditioners, air cooled condensers, fan and coil units, as well as heating and cooling air conditioners for smaller installations.—Thermal Engineering Corp.

695 Central Station Air Conditioner

Bulletin D-100 describes new, lower priced standard line of "Kennard/Nelson" packaged central station air conditioning units. Includes many features of the "Type A, Better Air" line. Twelve sizes, many arrangements.—American Air Filter Co., Inc.

696 Central Station Air Conditioners

Thirty-two page catalog gives information on central station air conditioners. Sectional construction — casing, coils, humidifiers, face and bypass dampers, filters, mixing box, fans — assures flexibility. Data enables easy step-by-step selection of correct unit.—Worthington Corp.

697 Central Station Air Conditioning

Brochure LL 349-10 consists of eight pages covering line of central station air conditioning, accessible hermetic liquid chillers, air handling units and fan coil units.—Airtemp Div. of Chrysler Corp.

698 Directory of Certified Air Conditioners

Periodically published "Directory of Certified Unitary Air Conditioners" shows model numbers and Btuh ratings of all unitary equipment certified under the ARI's Unitary Air Conditioner Certification Program.—Air-Conditioning & Refrigeration Institute.

699 Dual Purpose Air Handling Unit

Twenty-four page bulletin DD-5 describes large central station equipment for dual duct or multizone air conditioning systems complete with fans, filters, cooling and heating coils, automatic dampers, sprays, pumps, etc.—Buensod-Stacey Corp.

700 Fan Coil Units

Supplement to catalog 250 announces addition of two larger fan coil units to the "Bohn-Aire" line of room conditioners. Contains water and direct expansion capacity data and dimensional drawings for 800 and 1200 cfm units now available in two cabinet styles.—Bohn Aluminum & Brass Corp., Danville Div.

701 Gas Air Conditioning Units

Two folders on residential and commercial applications of "Arkla-Servel" Sun Valley gas air conditioning units show application, design and sales features. Specification sheets on new intermediate-capacity and modified units from 3½ to 6½ tons to be available. Sheets on 4.3 ton and downflow 3½ ton now available.—Arkla Air Conditioning Corp.

Be sure to type or print your name and address clearly when you request copies of these catalogs and bulletins.

An engineer or contractor obviously can't find *all* the information he needs in catalogs, bulletins and manuals — but he *can* find a great deal of the information that he must have.

702 Heat Pumps

Folder gives description of water-to-air, water-to-water, air-to-air and air-to-water heat pumps. Designed for use as handy guide when specifying.—Typhoon Air Conditioning Co., Div. of Hupp Corp.

703 High Velocity Induction Unit

Twelve page brochure 36R-80 describes high velocity induction unit 36R bypass "Weathermaster" featuring self-contained automatic air bypass control. New control replaces external pneumatic control systems and water valves.—Carrier Air Conditioning Co., A Div. of Carrier Corp.

705 Multi-Zone Central Station Units

Multi-zone central station units for heating, cooling, dehumidifying, humidifying, filtering described in new bulletin 34. Supply heated or cooled air simultaneously and independently to several zones. Includes construction and operation data, numerous charts and graphs on coil ratings, K factors, other technical information.—Marlo Coil Co.

706 Multi-Zone Central Station Units

Brochure K100.15-S on central station multi-zone air handling units gives detailed specifications on 11 sizes with both horizontal and vertical discharge and supply. Sizes to 36,000 cfm. Ceiling suspension available.—York Corp., Subsidiary of Borg-Warner Corp.

707 Package Air Conditioners

Forty page manual describes "Full Choice" package line of air cooled and water cooled units, condensing units, blower-coil units, rooftop units, packaged multi-zone units, remote package units. Capacity, performance and other data for selection included.—Worthington Corp.

708 Remote Air Conditioning Unit

Bulletin B-2002 describes "Riviera" type WF remote units for year 'round heating and cooling. Four models in five capacities from 200 to 750 cfm. Individual unit control by pushbutton. High efficiency heat transfer and air handling components deliver maximum output in 8⅜ in. deep units.—Warren Webster & Co., Inc.

709 Remote Room Conditioners

Catalog 381-A describes remote room conditioner line. Designed and built to provide individual room control of heating and cooling in multi-room buildings. Available in four sizes, 200 through 600 cfm; four types, vertical and horizontal models with and without cabinets. Nominal cooling capacities, ½ through 2 tons.—Acme Industries, Inc.

710 Roof Heating and Cooling Unit

Four page catalog 48B1 describes 48B commercial "Weathermaker" heating and cooling unit for roof installation on one story buildings. Completely self contained; consists of air cooled refrigeration section, gas fired heating unit, fan section.—Carrier Air Conditioning Co., A Div. of Carrier Corp.

711 Roof Heating, Cooling Units

Booklet gives specifications on new WAGH series rooftop heating and cooling units. In addition to technical data, line drawing and chart give dimensional information.—Welbilt Air Conditioning & Heating Corp.

712 Roof Mounted Air Conditioning

"Atmos-Pak" roof mounted, year 'round air conditioning system, available in capacities 5 through 35 tons, complete with supply and return air distribution chamber, described in bulletin. No field assembly required.—Air Conditioning, Inc.

713 Roof Mounted Air Conditioning Units

"Compact-Aire" packaged heating and cooling units for year 'round air conditioning described in bulletin YR 161. Recommended for rooftop mounting on commercial or industrial buildings. Heating capacities 120,000 to 1,000,000 Btu output; cooling, 5 to 40 tons. Efficient and economical, utilize no floor space, eliminate duct work.—Mammoth Industries, Inc.

714 Rooftop Heating, Air Conditioning

File describes specifications of rooftop heating and air conditioning units. Provides specification insert copy and detailed installation drawings.—Janitrol Heating & Air Conditioning, A Div. of Midland-Ross Corp.

715 Rooftop Heating, Cooling Unit

Bulletin R3H details information on compact rooftop unit for heating and/or cooling operations; 7½ and 10 ton cooling capacities, heating inputs 150,000 to 300,000 Btu. Especially suited for single level buildings with space problems. Approximately 35 lb per sq ft roof load. Can be controlled with simple heating-cooling thermostat.—Curtis Mfg. Co.

716 Room Air Conditioners

Newest line of room air conditioners in capacities from 6000 to 28,000 Btu per hr described in 12 page brochure LL-471. Applications listed for in windows, in walls, casement windows or commercial business. Includes unit specifications and selection guide.—Airtemp Div. of Chrysler Corp.

Your comments on this Trade Literature Supplement to Heating, Piping & Air Conditioning are invited.

717 Room-by-Room Air Conditioning

"Spotaire" WRC (for peripheral cooling/heating via floor mounted units) and CRC (hideaway applications) have minimum depth of but 8½ in. Quiet fan coil units available with 200, 300, 400, 600 cfm capacities. On-job, blower motor assembly removable. Right hand coil connections alter to left hand.—Drayer-Hanson Div., Hi-Press Air Conditioning of America, Inc.

718 Saturation Type Air Conditioner

Bulletin 122 describes air conditioning unit obtaining control of humidity and temperature by using saturated air at controlled temperature, determining dewpoint of air leaving saturation chamber, providing control of moisture by thermostats alone without relying on moisture sensitive instrumentation, assuring reliability for critical conditions and processes.—Niagara Blower Co.

719 School Air Conditioning Report

Report on actual case histories tells how air conditioning can be included without adding to cost of the school building. Air conditioning frequently permits designs which cut construction costs of schools.—Minneapolis-Honeywell Regulator Co.

720 School Heating, A.C., Ventilating

File on schoolroom heating, air conditioning and ventilating gives specifications of units. Provides detailed drawings.—Janitrol Heating & Air Conditioning, A Div. of Midland-Ross Corp.

721 Self-Contained Air Conditioner

Bulletin 760 covers through-the-wall "Airditioner" for cooling with refrigeration, or, supplied from a remote source, with steam or hot water for heating. Optional electric element for heating makes unit completely self-contained. Cools, heats, dehumidifies, filters and introduces outside air, exhausts stale room air.—Modine Mfg. Co.

722 Self-Contained Air Conditioners

Self-contained air conditioners with built-in evaporative condensers, water cooled condensers or with air cooled condensers, ranging in size from 3 to 60 tons.—United States Air Conditioning Corp.

723 Unitary Air Conditioning

Catalog 560 presents new line of "Seasonmaster" central station air conditioning units in both single zone draw through and multi-zone or double duct blow through arrangements. Contains design and construction features, including unit cutaways, engineering specifications and dimensional, selection and performance data.—McQuay, Inc.

724 Water Cooled Conditioners

Bulletin RS10X on packaged water cooled conditioners. Three through 20 ton units available with remote type air cooled condensers. Twenty-five through 60 ton units for large commercial and industrial applications provide complete air conditioning; available with evaporative condenser or water cooled condenser.—Curtis Mfg. Co.

725 Zone Control Cabinets

New 20 page bulletin AC-220 gives information on type PCB zone control air conditioning cabinets for use where several zones require heating, ventilating and air conditioning in varying degrees. Covers construction features, physical data, dimensions, fan performance, coil ratings.—Buffalo Forge Co.

Unit Heaters & Unit Ventilators

726 Cabinet Unit Heater

Bulletin 561 features new line of cabinet unit heaters in 17 types, eight sizes each, for floor, wall, ceiling and partially or fully recessed installation. Wide range of decorative colors and accessories. Steam or hot water for heating; ventilation optional. Quickly accessible concealed controls. For stores, showrooms, theaters, foyers, hospitals.—Modine Mfg. Co.

727 Classroom Heating, Ventilating Units

Engineering data catalog includes information on four different types of unit ventilators for schoolroom application. Specifications, construction features, application information and capacity ratings are given in this catalog.—Schemenauer Mfg. Co.

728 Gas Fired Unit Heaters

Descriptive literature and specification sheets cover gas fired unit heaters featuring new "Resistal," aluminized steel heat exchangers. Available in nine sizes from 25,000 to 225,000 Btu input in increments of 25,000 Btu.—Mueller Climatrol, Div. of Worthington Corp.

729 Gas Fired Unit Heaters

Bulletin B-1711 gives application data for propeller type gas fired unit heaters. AGA approved for use with natural, mixed or LPG gases. Small, lightweight unit design allows maximum headroom. Special port and burner tube design insures combustion efficiency, minimum maintenance. Sizes 25,000 through 310,000 Btu per hr input.—Warren Webster & Co., Inc.

730 Gas Unit Heaters and Duct Furnaces

Catalog GH-1 on gas unit heaters and duct furnaces from 25,000 to 300,000 Btu per hr; larger in multiples. Aluminized or stainless steel heat exchangers. Duct furnaces AGA approved for installation downstream of cooling coils. Make-up air units available. Options include dual fuel, modulation, two stage adjustable air bypass sections.—Hastings Air Control, Inc.

731 Propeller Fan Unit Heaters

Eight page catalog on propeller fan unit heaters contains performance data; shows light weight, compact design, rapid heat exchange, economical operation, minimum maintenance. Available in 10 sizes 25,000 to 250,000 Btu per hr.—Norman Products Co.

732 Steam, Hot Water Unit Heaters

Twenty page catalog 46-106 describes three types of unit heaters for steam and hot water heating systems. Rating, selection and dimensional data included with specifications.—Carrier Air Conditioning Co., A Div. of Carrier Corp.

733 Steam Unit Heater Test Code

Bulletin 20 (superseding bulletin 10) covers new steam unit heater test code, establishes uniform methods for testing dry steam unit heaters, developing performance ratings under AMCA certified ratings program. Includes definitions, apparatus descriptions, instructions and formulas for computing results and ratings, simplified and improved test procedures, techniques and equipment.—Air Moving and Conditioning Association, Inc.

734 Unit and Blast Heaters

Forty-two page catalog GP 956-R4-1-60 describes "Grid" cast iron steam heat transfer surface unit heaters (horizontal and down blow), blast heaters and radiators. Discusses corrosion in unit heaters. Shows one-piece construction high test cast iron heating sections. Air distribution charts, heating capacities, conversion tables, etc.—D. J. Murray Mfg. Co.

735 Unit Heaters

Bulletin covers attractive 360 circular design overhead sealed combustion unit heater that blends with modern decor. Data on two models: "Radial-Flo," distributes warm air outward and downward to floor; "Down-Blo," forces warm air directly to floor. Two sizes in each model; 85,000 to 115,000 Btu per hr.—Norman Products Co.

736 Unit Heaters

Bulletin B-1721 gives description and engineering data for three basic heater types for steam or hot water systems. Horizontal and vertical delivery types, new "Power-Throw" type for special applications where long heat throw is required. Low outlet temperature models available for steam pressures not exceeding 30 lb.—Warren Webster & Co., Inc.

737 Unit Heaters

Unit heaters, available in six models in capacities 60,000 to 717,000 Btu, are described in bulletin 60. Unit heater is dependable in service where corrosive atmospheres are encountered. Uses directional finned radiation.—Wilson Engineering Corp.

738 Unit Heaters

Catalog 2659A discusses effective space heating in buildings with high ceilings. Includes technical data, mounting heights, spread circle diameters, unit capacities of 30 sizes, specifications and dimensional drawings for "Vertiflow" unit heaters. Charts, tables and graphs included. Unit heater information available on horizontal, cabinet and direct gas fired models.—Young Radiator Co.

Valves, Fittings & Flanges

739 Ball Valves

Bulletin ADB-1001 describes new line of ball valves featuring exclusive tapered cartridge containing all working parts. Shows how cartridge slips out bottom in one piece while valve body remains in line. Disassembly of cartridge depicted. Details given on pressure and temperature ratings, sizes, other pertinent information. —Crane Co., Industrial Products Group.

740 Bar Stock Valves

Bulletin DH-766-B gives information on bar stock valves. Available in range of metals and sizes for applications requiring close control valves capable of withstanding wide range of working temperatures and pressures.—R-P&C Valve Div., American Chain & Cable Co., Inc.

741 Boiler Service Valves

Twenty-two page bulletin describes slow and quick opening straightway valves, angle valves, Y valves, duplex blow-off unit, water column valves, and fire protection valves.—Everlasting Valve Co.

742 Bronze Ball Valves

Bulletin DH-38 describes new forged naval bronze ball valve with "Auto-mating" seats to insure positive seating. Buna "N" seats impreg-

nated with molybdenum disulphide insure slippery, non-galling surface. Wiping action of ball forces out foreign matter, prevents wear.—R-P&C Valve Div., American Chain & Cable Co., Inc.

743 Bronze Gate Valves

Bulletin 573 shows new construction and operation features of 125 lb gate valve in cylindrical body construction. Also features new hex end design, "Kenalloy" stem and handwheel. Conforms to federal specifications WW-V-54, type 2, class A.—Kennedy Valve Mfg. Co.

744 Bronze Globe and Angle Valves

Bronze "Microcontrol" globe and angle valves with 500 Brinell stainless steel full plug discs and seats for 150, 200 and 300 lb services described in circular V-525. Recommended for close control of flow and throttling where hardened stainless full plug discs and seats provide tough but sensitive valve.—The Fairbanks Co.

745 Bronze Globe and Angle Valves

Four page circular describes bronze globe and angle valves featuring sure-grip handwheel, corrosion resistant (silicon-aluminum-bronze) stem, hexagonal gland for easy re-packing, body to bonnet joint for tight hold under expansion or contraction, stainless disc and seat rings treated to 500 Brinell hardness. Available sizes, ¼ to 3 in.—Walworth Co.

746 Bronze and Steel Valves

Catalog 200A describes "Hancock" steel gate valves, steel valves, bronze valves, and bronze and steel "Flocontrol" valves for steam, air, gases and liquids. Range of models fills virtually any application in their field. Provides ordering data, drawings, dimensions, specifications, operating and design features.—Manning, Maxwell & Moore, Inc.

747 Butterfly Valve Selection Guide

New bulletin 91.00 describes new "Double R/L" butterfly valve with replaceable rubber liner. Discusses application and construction features. Various types of actuators and selection guide also covered.—Continental Equipment Co., Div. of Fisher Governor Co.

748 Butterfly Valves

Circular 615-MF describes line of new butterfly valves, SP 150 psi, available for variety of applications in chilled water air conditioning systems and piping for temperatures not in excess of 200 F.—The Lunkenheimer Co.

749 Butterfly Valves

Bulletin 590X describes resilient seated wafer butterfly valves for drop-tight closure. Less weight and space, easier to install, simplified control manually or automatically, self cleaning, low pressure drop. Resilient seat easily replaceable at job site. Sizes 3 to 48 in.—W. S. Rockwell Co.

750 Check Valve Pressure Loss Tests

Pressure loss tests for a series of Williams-Hager silent check valves were conducted by Cornell University, Department of Hydraulics, School of Civil Engineering. Results in bulletin cover valves for pipe diameters ranging from 4 through 18 in.—Williams Gauge Co., Inc.

751 Check Valve Report

Principles and features of silent check valves discussed in four page technical report. Explains automatic closure that eliminates reverse flow in any piping system. Four basic types of valves shown, available in sizes from ½ to 20 in.—Combination Pump Valve Co.

752 Check Valves

Details on line of silent, non-slam check valves presented in catalog 60. Describes automatic, silent way valve closes before reverse flow can occur, eliminating water hammer and hazards of reverse flow. Sizes from ½ to 20 in.—Combination Pump Valve Co.

753 Check Valve Units

Eight page bulletin describes basic units which, when combined with standard pipe fittings of almost any type, form complete check valves suitable for a wide variety of services. Included are construction details, ratings, and a table of sizes and dimensions. Uses shown with different pipe fittings, tanks and pressure vessels.—Durabla Mfg. Co.

754 Check Valves

Circular V-63 on bronze and iron body check valves gives information on applications, basic design features and sizes for bronze swing and lift types with either screwed, flanged, solder or "Fairco-Braze" ends and for iron body swing types. Includes Underwriters' and Factory Mutual approved check valves.—The Fairbanks Co.

755 Check Valves

Sixteen page catalog 162 describes "Streamflow" center guided check valves in sizes 1 through 20 in. for pressures from 125 through 2500 lb. Available in cast iron, cast steel, stainless, bronze, aluminum and other alloys. Features described.—Miller Valve Co., Inc.

756 Check Valves To Control Surge Pressures

Four page bulletin covers in detail silent check valves and includes technical data, specifications and installation data on two types of valves—center guided type for service in lines from 1 through 10 in.; and globe type for lines from 3 to 24 in.—Williams Gauge Co., Inc.

757 Control Valves, Accessories

Bulletin 150 explains eccentric action and exclusive features, materials, dimensions and accessories of control valves. Applications of pneu-

matic, hydraulic, electric actuation for throttling and on-off given.—DeZurik Corp.

758 Control Valves with Cage Trim

Bulletin 605 contains information on new cage trim line of "Lifetime" control valves. Shows how unique cage design solves problems encountered with ordinary control valves. Made in single seated, unbalanced, 150 to 600 lb, ASA steel body designs. Selection, specification and evaluation data includes diagrams, charts, pressure drop, C_v and dimension tables.—Leslie Co.

759 Corrosion Resistant Fittings

Twenty-four page bulletin on corrosion resistant fittings includes engineering data, details on line of stainless steel "long tangent" pipe fittings, ½ through 4 in., for light wall schedules 5 and 10 process piping. Information on butt welding, socket joining and use of unique insert flange.—Speedline Fittings Div., Horace T. Potts Co.

760 Diaphragm Valves

"Grinnell-Saunders" diaphragm valves are described in 48 page catalog covering advantages, services (applications, materials handled, pressures, temperatures, vacuum), weir-type, straight-way and beer valve bodies, regular and special purpose diaphragms, bonnets and operating mechanisms.—Grinnell Co.

761 Ductile Iron Gate Valves

Twelve page catalog 1011 describes "Pipe-Pal" and "Pipe-Mate" lines of ductile iron gate valves, ½ through 12 in. Engineering specifications, pressure-temperature ratings, test data and installation recommendations listed.—The Ohio Injector Co.

762 Ductile Iron Valves, Fittings

Twelve page catalog gives details on designs, weights and dimensions of ductile iron valves and fittings. Includes comparison charts, engineering specifications and information on prices, terms and deliveries.—Stockham Valves & Fittings.

763 Eccentric Balancing Valves

Bulletin 110 discusses eccentric principle used in design of these valves. Lists dimensions, variety of materials of manually operated valves used on air conditioning installations. For chilled water balancing, hot water, pump shut-off, condenser and cooling tower lines and shut-off.—DeZurik Corp.

764 Electric Zoning Valve

Bulletin 2120-5 describes "Hush-A-Matic" electric zoning valve for wet systems, used in hotels, hospitals, public buildings and offices. Includes features, dimensions, diagrams and flow capacity chart.—Hays Mfg. Co., Automatic Controls Div.

See the index on the front cover of this supplement to Heating, Piping & Air Conditioning for the classifications of products under which this literature is listed.

765 Flexible Pipe Connector Guide

New manual AM-9 contains analysis of flexible pipe connectors, their application, design and handling. Discusses interpreting engineers' specifications, avoiding connector failures, proper installation. Includes checklist to assure proper unit selection. Data on actual applications, tables, drawings provided.—Allied Metal Hose Co.

766 Forged Fittings Specification Sheet

Four page specification sheet for forged steel fittings gives all information on one spread for insertion under desk-top glass for permanent reference. Detailed specifications and engineering drawings.—Capitol Mfg. Co.

767 Forged Flange and Fitting Specifications

Forty-eight page brochure FB 77 summarizes most commonly used ASME and ASA specifications for welding fittings and forged steel flanges. Intended as an aid in computing preliminary design requirements for pressure piping systems.—Babcock & Wilcox Co., Tubular Products Div.

768 Forged Steel Needle Valve

Specification sheet gives technical and practical details on new, improved design needle valve. Of particular interest to chemical, petrochemical, and allied process industries. Rated to 5000 psi at 70 F; sizes ⅛ to ½ in.—Capitol Mfg. Co.

769 Forged Steel Unions

Bulletin U-2 gives specifications for screw end and socket welding, ⅛ to 3 in., unions for high pressure, high temperature. Dimensions, weights of forged steel unions, tongue and groove and O-ring flange unions, orifice, tab orifice, clamp ring, insulated, two-lug nut and four star lug nut unions.—W-S Fittings Works, H. K. Porter Co., Inc.

770 Gate Valves

Four page supplement H to catalog VC-3 covers "Husky" gate valves with buna-N conical type gate. Will throttle. Construction features are described and dimensions tabulated. Ratings and uses are shown in this supplement.—Nibco Inc.

771 Gear Operators for Valves

Bulletin AD-2441 describes new weatherproof "Converto-Gear" operator for converting iron and steel gate valves to gear operation in less than 30 minutes. Shows dimensions, step-by-step procedure for installation on outside screw and yoke and non-rising stem gate valves.—Crane Co., Industrial Products Group.

772 General Service Valves

Twenty page bulletin describes and gives specifications for single and double disc valves without side stuffing boxes, for handling fluids destructive to stem packings; cylinder operated valves for accurate control of process work; fire protection valves; steam jacketed valves for viscous materials.—Everlasting Valve Co.

773 Globe Valves

Circular 602-MF describes LQ600 globe valves with "Brinalloy" seats and discs. Tested and proved free of leakage, erosion and wire drawing. Available for 200 lb SP, 550 F—400 lb WOG and 150 lb SP—300 lb WOG. Offer new standards for valve life.—The Lunkenheimer Co.

774 High Pressure Pipe Fittings

Applications of high pressure (2000, 3000, 6000 lb) pipe fittings and eight types of unions described in bulletin A3-S1. Data on screw end and socket welding, ⅛ to 4 in. fittings in stainless alloy and carbon steel includes dimensions and weights. Eight pages of engineering specifications, data.—W-S Fittings Works, H. K. Porter Co., Inc.

775 High Pressure Valves, Fittings

Line of "O-Seal System" valves and fittings for high pressure liquid or gas service described in 36 page catalog 60-B. Unique principle assures leak-proof, hand tight connections and unions; positive shut-off at pressures to 6000 psi, temperatures from —20 F. 1500 psi series also detailed.—Combination Pump Valve Co.

776 Industrial Valves

Series of four page folders reviews features of gate valves (1433-V); globe and angle valves (1420-V); check valves (1427-V).—Ohio Brass Co.

777 Internal Burst Pressures for Pipe Joints

Sheet shows test results of internal burst pressures on line of welded fabricated pipe joints in Schedule 40 A53 grade B seamless material from 2 to 12 in. standard pipe sizes.—Allied Piping Products Co., Inc.

778 Iron Body Gate Valves

New five page circular lists service ratings, sizes, dimensions and material specifications for all iron body gate valves in line. Have application in construction, gas transmission, chemical, electrical and petroleum industries. A section is devoted to higher strength cast iron wedge gate valves.—Walworth Co.

779 Light Wall Stainless Fittings, Flanges

Bulletin TT 944 contains design, layout and engineering data on "Pipe-Mate" line of light wall stainless steel tangential fittings and flanges, ½ through 4 in., for use with Schedules 5S and 10S process pipe lines. Explains variety of joining methods, including "rolled-in" assemblies incorporating unique rotating insert flange.—Tube Turns Div., Chemetron Corp.

780 Lubricated Plug Valves

Bulletin AP-1059 covers lubricated plug valves for providing maximum control with minimum cost and maintenance for air handlers, compressing units, water lines, natural gas or fuel oil lines, and water towers. Compactly designed for versatile operation. Feature tight sealing, full pipe area port opening, easy operation.—W-K-M Div. of ACF Industries, Inc.

781 Plug Valves

"Durco" type FT "Sleeveline" valves are non-lubricated plug valves available in carbon steel, 316 SS, "Durimet-20," "Monel," nickel, "Chlorimet 2 and 3," in straight-way and three-way design. Sizes ¼ through 6 in. "Teflon" sleeve between plug and body serves as lubricant and sealing medium. Described in bulletin V/14.—The Duriron Co., Inc.

782 Plug Valves

Bulletin 110 describes non-lubricated plug valves based on eccentric principle originated by manufacturer. In variety of plug facing materials, most castable metals including semi-steel, bronze, ni-resist stainless steel, steel, aluminum, ductile iron, nickel, "Monel" and "Hastelloy." Wide range of sizes.—DeZurik Corp.

783 Portable Bronze Safety Valves

Bulletin 740 describes "Consolidated" portable bronze safety valves designed for package type steam generators and fire tube boilers. For steam and air services. Furnished in side outlet and top outlet types, medium and high capacities. Ordering data, drawings, dimensions, specifications, operating and design features given.—Manning, Maxwell & Moore, Inc.

784 Portable Valve Test Stand

Catalog FE-147R describes self-contained portable "Porta-Tester" for testing safety and relief valves, globes, gates, plugs and other valves, pressure vessels, piping, pump cases. Can be set for requirements up to 3000 psi. Can be taken into oil refineries, aboard ship, remote installations or set up in plants.—Farris Engineering Corp.

785 Pressure Reducing Valve

New "Topper" pressure reducing valve employs 3:1 mechanical piloting device out of steam path, has no close fitting parts. Has flat capacity-regulation characteristics and close control over complete operating ranges. Inlet pressures to 300 psi, 550 F, reduced pressures range from 2 to 35 psi. Available in iron or bronze; all end connections. Sizing and capacity data in bulletin 582A.—Leslie Co.

WHEN USING REPLY CARD

When you use the reply card on pages 2-67 and 2-68 to request the literature you want, please circle clearly the corresponding item number on the card for each catalog or bulletin to be sent to you.

The item number is the big number at the left of the title for each item. For example, in the item immediately above, the number to circle on the reply card would be 785.

786 Pressure Reducing Valves

Bulletin 954 outlines line of pressure reducing valves, float and lever valves, temperature regulators, pump governors, back pressure and relief valves.—Klipfel Valves Div., Hamilton-Thomas Corp.

787 Pressure Regulators

Bulletin 160 describes precision pressure regulators, types AA and AR, and IA and IR suitable for steam or air service with either 300 lb bronze or 250 lb semi-steel body with stainless steel unit pilot valve, main valve and seat, sizes ½ through 6 in.—O. C. Keckley Co.

788 Pressure Regulators

Bulletin 116 introduces new line of "American" pressure regulators in direct and reverse acting types. Product advantages and construction features shown plus ordering data in form of dimensional drawings, sizes, weights, valve construction, capacities, supply pressures, data on valve sizing.—Manning, Maxwell & Moore, Inc.

789 PVC Ball Valve

Four page bulletin contains information on PVC corrosion resistant, low torque ball valve. Requires only one-fourth turn to operate. Outstanding features shown. Made in sizes ¼ to 4 in., socket weld or threaded ends. Durable, features rugged, compact body with external one end adjustment.—Walworth Co.

790 Relief Valves

Bulletin 760 describes 11-A and 11-R pressure reducing and relief valves featuring full ported orifice for greater capacity and increased flow of steam, air, water, oil and gas. Available with semi-steel body, bronze or stainless steel trim and composition disc, sizes ⅜ to 2 in.—O. C. Keckley Co.

791 Renewable Composition Disc Valves

Bronze globe, angle, lift check and stop and check valves, 150 lb SWP, with renewable composition discs described in circular U-01. Made with two piece radial seat union bonnet for fast replacement of discs and positive seal of body to bonnet joint. Discs available for various services also covered in circular.—The Fairbanks Co.

792 Reversing Valves

Design of reversing valves features full seating system, few moving parts. Dense brass movement and teflon seating offer durability and life. Dual tube construction and full seating design protect against efficiency loss from heat exchange and leakage. Range is 1 through 20 tons. —Chatleff Controls, Inc.

793 Saddle Fittings

Brochure describes line of shaped branch outlets for pipe for economical welded pipe joints. —Allied Piping Products Co., Inc.

794 Seamless and Welded Welding Fittings

Twelve page bulletin 60-C describes new line of seamless butt welding fittings, now offered in addition to extensive line of welded type fittings. Manufacturing procedures, size ranges, types of available fittings (both stock and special) listed. with description of metallurgical and dimensional controls.—Midwest Piping, Div. of Crane Co.

795 Seamless Welding Fittings and Flanges

Eight page brochure FB 502A covers carbon, alloy and stainless steel seamless welding fittings and flanges. Contains charts of standard sizes and schedules according to ASA B36.10 and ASA B36.19. Illustrates fittings and flanges commonly produced, lists sizes and types available. —Babcock & Wilcox Co., Tubular Products Div.

796 Selection of Welding Fittings

Twelve page brochure FB 78 contains data on materials selection, specifications and analyses, effects of alloying elements, mechanical properties, arc welding procedures and catalog information. This preliminary guide to the selection of welding fittings for pressure uses covers carbon through stainless steels.—Babcock & Wilcox Co., Tubular Products Div.

797 Semi-Steel Valves, Accessories

Revised bulletin V-203 shows line of semi-steel valves, wrenches, adapters, extensions and other accessories. Valves diagrammed, sizes and specifications given. Provides data on cast iron flanges, housings, high head extensions. Describes lubricants and equipment, shows application. Ordering information included.—Rockwell Mfg. Co., Nordstrom Valve Div.

798 Service, Meter and Air Cocks

Revised bulletin V-605 features lubricated service, meter and air cocks for positive, leakproof sealing for use in gas and water utilities, lower pressure industrial applications, air and hydraulic lines, mine and shipyard applications, etc. Lists lubricants, wrenches, other accessories. Ordering information provided.—Rockwell Mfg. Co., Nordstrom Valve Div.

799 Slide Valves

Standard line of "blast gates" for control and shut-off of air, gases and liquids listed in bulletin 500R. When fully open, valve provides unobstructed pipe size flow. Available with pull handle, hand lever, hand wheel, chain wheel or cylinder operator. Sizes 1 to 20 in.—W. S. Rockwell Co.

800 Socket Weld and Screwed Fittings

New, concise, eight page forged steel fittings catalog FSF2-1961 provides immediate reference guide to socket weld and screwed fittings in sizes up to 4 in. in all schedules and services.—Bonney Forge & Tool Works.

Use the handy postage-paid reply card on pages 2-67 and 2-68 to request copies you want.

801 Solder End Bronze Valves

Twelve page catalog gives designs, weights and dimensions of solder end bronze globe, gate and check valves for copper tubing installations. Includes engineering specifications and information on prices, terms and deliveries.—Stockham Valves & Fittings.

802 Solder End Gate Valves

New line of solid wedge solder end gate valves, ¼ through 2 in., in both rising and non-rising stem design described in bulletin 1013. Rated 300 lb WOG, for use with K, L and M copper tubing.—The Ohio Injector Co.

803 Solder End Valves

Circular 603 describes line of bronze solder end valves—globes; 150 lb SP—300 lb WOG, with renewable, non-metallic disc; gates: 125 lb SP —200 lb WOG, with rising stem, double wedge disc, solid wedge disc, non-rising stem, single wedge disc; checks: 125 lb SP —200 lb WOG with renewable bronze disc. Includes dimensions.—The Lunkenheimer Co.

804 Solder Joint Valves

Bulletin 581 describes uses and construction features of solder joint valves for copper tubing types K, L and M. Shows operation, gives detailed dimensions, installation instructions.—Kennedy Valve Mfg. Co.

805 Solenoid Valve

Literature covers "Midg-O-Matic" solenoid valve for application in limited spaces. Provides for accurate automatic control of small water or air flows. Available in wide range of voltages and solenoids, in angle or straight pattern. Flow capacity chart shows performance to 150 psi. Available with moisture-proof or "Kast-Coil" (lifetime guarantee) coils.—Hays Mfg. Co., Automatic Controls Div.

806 Standard and Low Pressure Valves

Condensed catalog sheets list standard pressure globe and angle valves (1413-V); standard pressure gate valves (1412-V); standard and low pressure check valves (1411-V); low pressure globe and angle valves (1409-V); radiator, bypass, manifolds (1410-V).—Ohio Brass Co.

807 Steam Heated Plug Valves

Bulletin AP-1057 gives facts on handling asphalt and other viscous materials. Unique base plate steam jacket on plug valves keeps material hot and fluid for smooth continuous flow. Any standard lubricated plug valve of the manufacturer can be furnished with steam jacket baseplate. Sizes, ½ to 12 in.; pressures from 175 to 500 lb WOG.—W-K-M Div. of ACF Industries, Inc.

808 Steel Couplings and Pipe

Bulletin gives sizes, lengths, threads, weights and carton content of steel pipe couplings plus specifications on steel pipe, including standard, extra strong, double extra strong and structural pipe.—Wheatland Tube Co.

Advertisers in Heating, Piping & Air Conditioning have furnished these descriptions of their catalogs, bulletins, and other helpful data. Copies are available on request.

809 Steel Pipe Couplings

Bulletin gives sizes, lengths, threads, weights and carton contents of merchant, half and API line pipe couplings plus other information, with specifications on steel pipe, including standard, extra strong, double extra strong and structural pipe.—Wheatland Steel Products Co.

810 Steel Pipe Couplings Chart

Detailed specification sheet for the following steel pipe couplings: standard merchant, extra heavy, AAR (railroad), drive well, drive pipe, API line, reamed and drafted. Also includes 3000 and 6000 lb carbon steel.—Capitol Mfg. Co.

811 Swing Gate Valve

Bulletin 801 covers plastic lubricated "Lube-Seal" swing gate valve. Positive, quick acting, absolutely tight shut-off. No leakage; unrestricted full flow area. For air, gases, steam and liquids to 300 psi and temperatures to 500 F; sizes 1½, 2 and 2½ in.—W. S. Rockwell Co.

812 Valve and Hydrant Manual

Catalog M612 describes AWWA valves and hydrants, gives construction details. Includes necessary information for installation, maintenance, inspection and repair, plus detailed specifications.—Kennedy Valve Mfg. Co.

813 Valve Reference Chart

Reference chart compares manufacturer's valve figure numbers with those of other manufacturers. Contains cross index of steel valve trim on manufacturer's valves and competitive makes. Chart is 15×21 in., on heavy stock.—Stockham Valves & Fittings.

814 Valves

"Know Your O-B Valves," 16 page booklet 1496-V, briefly describes valve line; contains condensed listing of gate, globe and angle, check and special valves; figure number comparison chart. Lists special features, gives installation tips.—Ohio Brass Co.

815 Valves

Twenty-four page catalog CD-2 provides condensed product descriptions on complete "OIC" line of bronze, iron, forged steel, and cast steel

valves. Includes pressure-temperature ratings, trim specifications and face-to-face dimensions. —The Ohio Injector Co.

816 Valves for Air Conditioning, Heating

Revised bulletin V-620 shows line of valves for air conditioning and heating made of high tensile cupola cast iron. Lists advantages; explains and diagrams Pascal's Law, basic principle of manufacturer's valves. Discusses valve selection, includes chart to aid selection.—Rockwell Mfg. Co., Nordstrom Valve Div.

817 Valves and Strainers

Bulletin C-89A presents reducing, relief, lever and float valves and strainers for heating, plumbing, or general industry. Describes construction, capacities, specifications and dimensions of these valve types.—Fisher Governor Co.

818 Water Diverting Valve

Technical bulletin V-102 describes "Vectrole" V-58 electric water diverting valve featuring dense brass construction; silent, non-liming moving parts. Balanced resistance to flow in either position. Range from 0 to 10 gpm. Simple, compact, field serviceable construction. On-off operation for automatic summer-winter convector control.—Chatleff Controls, Inc.

819 Water Pressure Reducing Valves

Effective regulation of water flow to such fast acting equipment as flushometers and snapcocks provided by type D34 water pressure reducing valves as described in bulletin 10009-A.—Spence Engineering Co., Inc.

820 Welding and Forged Steel Fittings

Newly revised 50 page catalog on welding and forged steel fittings provides descriptions, technical data and installation instructions on "Weldolets," "Thredolets," "Sockolets," "Elbolets," "Brazolets," "Sweepolets" and entire forged steel fitting line. Actual installations shown.—Bonney Forge & Tool Works.

821 Welding Fitting Template

Piping system welding fitting template includes most commonly used welding fitting shapes. Prepared in cooperation with and for piping designers to speed design and drawing time on welded piping systems.—Bonney Forge & Tool Works.

822 Welding Laterals and Tee Joints

Dimensional sheets list line of fabricated tee joints and 45 deg welding laterals.—Allied Piping Products Co., Inc.

Warm Air & Direct Fired Heating

823 Classroom Heating, Air Conditioning

Bulletin CC-605 provides school heating, cooling and ventilating information and application of "Comfort Curtain" system. Covers research and air distribution, heat gain and loss, heat source—warm air, hot water, steam, electric and heat pump—and air conditioning and controls.—Lennox Industries Inc.

824 Coal Fired Warm Air Heating

New descriptive folder depicts new line of low cost coal and stoker fired, gravity and forced warm air heating equipment.—Illinois Iron & Bolt Co., Heating Div.

825 Combination Units

Selection of sizes and styles for commercial heating and cooling shown in new catalog. Gas, oil or combination gas and oil available. Packaged units adaptable to floor, ceiling or roof mounting. Specifications simplify selection of equipment.—Tjernlund Mfg. Co.

826 Counterflow Industrial Space Heaters

Six page specification data sheet 580-12D describes construction, applications and advantages of line of eight counterflow industrial space heaters. Drawings, dimensions and engineering data provided on equipment from 400,000 to 2,000,000 Btu per hr output.—Dravo Corp.

827 Direct Fired Heaters

Six page bulletin 501A describes direct fired heaters in capacities from 400,000 through 3,500,000 Btu output for gas, oil, or combination gas-oil firing. Suitable for floor, horizontal or inverted mountings. Features, engineering details and ratings table included. Various applications and mountings covered.—Arkos Mfg. Co.

828 Direct Fired Space Heaters

Bulletin C-357 describes "Commercial-Aire" direct fired space heaters for industrial space heating with capacities from 300,000 to 2,000,000 Btu output. Combustion chamber design handles light oil, gas, heavy oil or combination gas-oil.—Mammoth Industries, Inc.

829 Direct Gas Fired Heaters

General catalog lists line of direct gas fired heaters. Information given on unit heaters, propeller fan and centrifugal fan types, in sizes of 25,000 to 300,000 Btu. Also describes duct furnaces and "Venter," a motorized flue exhauster.—Reznor Mfg. Co.

830 Gas Fired Fresh Air Supply Heaters

Bulletin GFAS-60 describes direct gas fired fresh air supply heaters of unitized construction, factory pre-wired and piped ready for installation. They are made in five sizes suited for wall or roof inlet and offer up to 50,000 cfm and 4,500,000 Btu per hr output.—L. J. Wing Mfg. Co., Div. of Aero Supply Mfg. Co., Inc.

831 Heavy Duty Warm Air Furnaces

Bulletin J557 deals with industrial, heavy duty, direct fired warm air furnaces used in heating, cooling, ventilating, drying and make-up air applications. Furnished factory assembled, wired and flame tested. Fired by gas, light and heavy oil or combination burners. Arranged for horizontal, inverted or floor locations.—Johnson Heater Corp.

832 Horizontal Suspended Heaters

Bulletin JAS460 covers horizontal suspended heaters, counterflow air tube design, of heavy, durable construction. Fired by gas, oil or combination burners. All units factory assembled, wired and flame tested. Suitable for heating, cooling and make-up air applications for buildings where floor space is a premium. Available for duct heater applications.—Johnson Heater Corp.

833 Industrial Direct Fired Heater Manual

New application manual for industrial direct fired heaters covers survey procedures, transmission factors, conduction, infiltration, exhaust calculations, estimating factors, open loading-door heating, fuel pipe designing, process heating calculations, make-up air systems, high temperature psychrometric charts, conversion tables, reference data.—Lennox Industries Inc.

834 Industrial Direct Fired Heaters

Two bulletins describe models AT and OG series industrial space heaters. Gas, oil or combination fuel burners available with pushbutton changeover. Outputs from 400,000 to 2,000,000 Btu per hr. Rugged construction with enclosed burner. Adaptable for space heating, ventilation, make-up air, process heating, air conditioning.—Lennox Industries Inc.

835 Make-Up Air Heaters

Form 552-1-60 lists "Champion" MA gas, direct fired, make-up air heaters, 8000 to 150,000 cfm. Come completely packaged, factory fire tested, with DWDI wheels for static pressure operations. Insurance Underwriters approved.—National Heater Co., Inc.

836 Oil or Gas Heaters

"Compact-Aire" heaters for churches, schools, commercial buildings, offices, light manufacturing and large homes featured in bulletin CA-459. Btu outputs from 185,000 to 500,000. Stainless steel cylindrical combustion chambers of high efficiency tailor flame of gas or oil fuel in any position. Ten year warranty.—Mammoth Industries, Inc.

837 Rooftop, Make-Up Air Heaters

Direct fired rooftop heaters and make-up air heaters described in bulletin 712.—Campbell Heating Co.

838 Schoolroom Heating, Ventilating Systems

Bulletin LM 11-60 on individually gas fired, forced air schoolroom heating and ventilating systems includes cost and performance data. Typical installations diagrammed. Available in handy bookshelf "Util-i-Duct" or "Wall-i-Duct." Two styles, one with heating unit in classroom, two with "Inn-A-Wal" counterflow model for installation in separate heater room.—Norman Products Co.

839 Space and Duct Heaters

Form TF-553-61 covers "Therma-Flo Universal" space and duct heaters, 180,000 to 1,000,000 Btu, in horizontal, counterflow, high-boy models, with UL listed controls and burners. Stainless steel combustion chamber. Factory assembled, wired and fire tested.—National Heater Co., Inc.

840 Space Heaters

Four models of "Paraflo" space heater described in six page brochure 580-13, with drawings, dimensions and engineering data. Capacities vary between 200,000 and 500,000 Btu per hr output. For use in small and medium-sized commercial and industrial buildings.—Dravo Corp.

841 Space Heaters

Form 550-1-60 describes "Champion" TD series indirect fired space heaters, 400,000 to 4,000,000 Btu. Completely assembled, factory wired and fire tested. UL, AGA and Insurance Underwriters listed and approved.—National Heater Co., Inc.

842 Tubular Space Heater

Bulletin J860 discusses how one patented "Air Rotation" tubular space heater burning light or heavy oil, gas or combination of both, can uniformly heat in excess of 1,500,000 cu ft of open building space without ducts. Also suitable for use with duct distribution system.—Johnson Heater Corp.

843 Unitized Heaters

General catalog presents line of gas-oil "Space Saving" unitized heaters as reference for application to various commercial heating and cooling requirements. Packaged units adaptable to any specifications. Deliver from 150,000 to 3,000,000 Btu with air volumes from 1600 to 25,000 cfm. Includes data on roof mounted units.—Tjernlund Mfg. Co.

844 Warm Air and Direct Fired Heating

Four page folder 38 gives dimensions, ratings and descriptions of direct fired heaters up to 3,000,000 Btu per hr capacity.—Campbell Heating Co.

Water Treatment & Corrosion Control

845 Air Conditioning Cooling Water Treatment

Bulletin 117 describes advantages of chromate type liquid materials for prevention of corrosion and scale deposition in air conditioning cooling water systems. Use of a specially designed "Micro" chemical feeder which requires a minimum of attention is recommended to eliminate the necessity for manual daily chemical feeding. —The Bird-Archer Co.

846 Amines for Corrosion Control

Bulletin CP-100 describes advantages of amines in corrosion protection of steam and condensate return systems, with graphs and case histories. Eight point water treatment service, designed to keep operating cost at a minimum and boost efficiency, is described.—The Bird-Archer Co.

847 Corrosion Control of Buried Piping

Folder HCG-7369 covers "Corr-Prev" system of protective tape coatings which embodies five components: "Chaseprime" (primer), "Chasefil" (putty filler), "Chasekote" (tape coating), "Chasemold" (molding tape) and "Chasewrap" (overwrap). In combinations with "Tapechasers" (application machines), system offers package for corrosion control of buried piping.—Chase & Sons Inc.

848 Proportioning Pumps

Bulletin describes advantages of "Baco" proportioning pumps and chemical feed units and includes tabulation of capacity and pressure vs. motor horsepower. Pumps are high pressure, low capacity, reciprocating plunger types designed for application where a controlled capacity of fluid is required.—The Bird-Archer Co.

849 Protecting Metal Surfaces

"Pioneer" metal protectors, fluid type mastics designed for the protection of metal surfaces, provide excellent protection against acid, alkali and salt corrosion, are waterproof, fungus proof and provide excellent abrasion resistance. Can be applied over bare, slightly oily, primed or painted surfaces. Surface need not be galvanized. —Witco Chemical Co., Inc.

850 Scale and Rust Removal

Eight page booklet on controlled chemical removal of lime scale and rust tells how to eliminate work and dangers of rodding or scraping. Gives instructions for soak or circulation descaling with specially inhibited liquid No. 32 or powdered "Drycid."—Oakite Products, Inc.

851 Treating Recirculating Water Systems

"Airefiner" No. 54, specially designed for air conditioning systems where water is recirculated, is described in service bulletin 58A. Tells how compound prevents scale, inhibits growth of algae and slime and controls corrosion.—Oakite Products, Inc.

852 Water Cooling Problems

Booklet on water cooling problems and how to correct them tells how scale deposits and algae corrode air conditioning and refrigeration systems. Gives practical answers to these problems. —Virginia Smelting Co.

853 Water Treatment in Humidifying Systems

Service bulletin 17A tells how "Airefiner" No. 52 inhibits deposition of scale on equipment, controls algae and slime growth, minimizes corrosion of equipment surfaces. May be used in humidifying systems which spray moisture into the atmosphere.—Oakite Products, Inc.

854 Water Treatment Products

Catalog 659 discusses "Micromet" feeders and water treatment products for prevention of rusty water, lime scale and corrosion problems. Corrosion inhibitor CS, gas leak detector and various water test kits also described in catalog.—Calgon Co.

855 Water Treatment Products

Brochure REC describes line of water treatment products for evaporative condensers, cooling tower and chilled water systems. Describes scale remover, powdered acid, algaecide and water pressure operated feed pump.—Calgon Co.

When you make use of the handy reply card on pages 2-67 and 2-68 to ask for copies of the catalogs, bulletins and other data reviewed here, please type or print your name and address clearly so that the information you want can be sent you without delay. And don't forget to include your name and address on the card! Some of the cards have been returned to us without this essential information.

Welding & Brazing Equipment

856 Arc Welding Non-Critical Piping

Bulletin 2112.3 lists advantages of welding piping installations, describes pipe welding procedures, calculation of welding costs for pipe 1 through 6 in., makes recommendations concerning type of electrodes and machines best suited for applications.—The Lincoln Electric Co.

857 Backing Rings

Flier describes type CCC-NUB backing ring (iron pipe fitting) designed for quick, easy alignment of pipe where variation in inside diameters is relatively great. Chamfered "Nubs" allow close tolerance fit-up and clean strike-off. Automatically sets root gap. Rings beveled to assure non-restricted fluid flow.—Robvon Backing Ring Co.

858 Backing Rings

Flier features type C-NUB backing ring (iron pipe fitting) for precise close tolerance fit-up. "Nubs" automatically set root gap; melt with metal to give complete penetration and fusion. —Robvon Backing Ring Co.

859 Backing Rings

Folder describes type CC-NUB (iron pipe fitting) backing ring designed for quick, easy alignment of pipe where inside diameters are slightly out of round. Welder has choice of striking off "Nubs" or leaving them intact to be melted into weld mass of first root pass.—Robvon Backing Ring Co.

860 Brazing Small Diameter Piping

"Why You Should Braze Small Diameter Piping" is title of reprint; discusses brazed joints in commercial piping. Lists advantages, gives test results. Shows comparisons of actual brazed joints vs. threaded joints. Includes glossary of useful terms, diagram for brazing pipe fittings and a useful trouble-shooter's brazing check list of problems and their solution.—Handy & Harman.

861 Pipe Rotators for Welding Operations

Brochure describes pipe rotating equipment for field or shop use in manual or automatic welding of pipe and fittings. Shows various models and type of work that can be accommodated.—Cecil C. Peck Co.

862 Spud Welders

Sixteen page pamphlet describes various models of rotating welding head principle for automatic attachment of spuds, bosses, nozzles, fittings to boilers, tanks, pipe, etc. Shows types of work done with this machine.—Cecil C. Peck Co.

863 Transformer Welder

Bulletin 4610.1 describes new 225 amp a-c transformer welder for shop use in pipe fabrication and installation jobs. Operates with low hydrogen and stainless steel as well as mild steel electrode.—The Lincoln Electric Co.

864 Welding Pressure Piping

Bulletin 2112.2 describes techniques and procedures for manual and automatic welding of cross country transmission lines and high pressure inner-plant pipe systems. Includes pipe material specifications, electrode recommendations and tables for estimating electrode consumption for 2 to 60 in. pipe sizes.—The Lincoln Electric Co.

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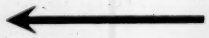

(Index to Manufacturers by Item Numbers is on page 2-2)

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